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REQUIRED READING FOR MARCH.

GOSSIP ABOUT GREECE.

BY J. P. MAHAFFY, M. A.
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VI.

THE ALPS AND THE PLAINS.

We have still left untouched in our survey of the Morea the central fortress of Arcadia, which itself contains two large oval plains, surrounded and separated by mountains—the higher plateau of Tripolitza and the lower and richer one of Leondari (Megalopolis). As I have already explained, you can penetrate into these fastnesses from the west and south with comparative ease, by following up the Alpheus or the Eurotas to their sources, through defiles narrow indeed, but practicable. Toward the east it is not so, and to ascend from Argos or Astros to Tripolitza or Mantinea, you must ascend steep mountains either by a tortuous carriage way, of great labor to horses, or mount by a still steeper path, literally cut in steps, which none but a Greek mule or pony could possibly travel. The inner country lies from 2,000 feet to 6,000 high—some of the highest tops exceed 7,000 feet, and I need hardly tell the reader that however hot the sun may be, such an altitude implies very cold nights, fogs, storms, and much snow in winter and spring. The population is, therefore, necessarily, hardy mountaineers, living by the most strenuous and constant labor, when they are not forced to idleness by deep snow. A very similar country which I once visited when following the track of Hannibal, is the province of southern Calabria in Italy, where you find in late spring snow storms, and people wrapped in huge deep brown *capotes*, in fact a climate and a dress far more wintry than ever could be met with in England or Ireland.

Yet this Arcadia figures among the poets as a land of piping shepherds, and unmuffled nymphs, sitting by streams under the shade of trees, and whiling away an idle happiness in dalliance and in sport. It is the aspect of Surrey and the manners of Watteau which have been imported into the wild and weird gorges that nursed the bear and the wolf in their sullen retreats. The solution of this problem, which occupied me for many a day, I have given in the XIIth Chapter of my "Rambles in Greece."

The value of this province, and of the northern Alps of Phocis and Ætolia which are so similar in character, is to the Greek nation incalculable, for it is in the nature of things

that populations of cities and plains should be exhausted. Wars, pestilences, emigrations, the unwholesomeness, and the vices of city life,—all these causes produce national decay, which first affects the advanced parts of nations. Then it is that they are refreshed by an influx of the new blood, and the untainted vigor of the mountaineers. This has happened over and over again in Greece, and is one reason of the permanence of its youth. The Dorian invaders who came from the north, seized upon the cities and plains of the Morea when they had long been held by a luxurious class of Achæan princes. But that is almost prehistoric, shortly after the Trojan War. The Spartans always counted as hardy mountaineers, and they improved the tone and standard of Greek manliness for generations. When the other Greeks were fading out after the days of Alexander, these very Arcadians of whom we are speaking, and the Ætolians in northern Greece, stood forth late in the day to shed luster by their courage and their ability over the decaying fortunes of their country. In the War of Liberation—I must not dally over ancient Greece—the mountaineers of Arcadia, such as the bandit Colocotroni² who dwelt in the Frankish castle of old Hugh de Brienne at Karytena, divided with the wild pirate-traders of Hydra and the islands the glories of that long and terrible conflict.

These Alps are, therefore, a sort of reserve of the nation, a deposit of gold like the huge war-fund which the Germans are said to have laid up for the day of tempest, a retreat where simplicity and ignorance find a rude but safe home, and where human power can lie fallow, and await the day when the fields of cultivation are exhausted.

We are all going more or less mad in England about gardens, especially about the growing of hardy plants from far countries, in the open air. To amateurs of this description, who will take the trouble to dismount and dig up a root on their way, the Alps of Arcadia are a veritable El Dorado.³ There are beautiful anemones, irises, field lilies, and orchids to reward diligence; for the contrasts of heat and cold, of barren hillside and shady forest, promote an extraordinary wealth of various vegetation. The Arcadian Alps, however, are much more cultivated, often in the most

laborious way, by artificial terraces, than those of Phocis; which latter, therefore, but for their harsher climate, ought to yield to the botanist a virgin soil, disturbed by nothing but wandering shepherds and their hungry flocks. I plead guilty to this gardening madness, and often forgot my archaeology to search for a new cyclamen or daffodil, to the wonder of the mule boys (*agoyates* is their name) who thought me perfectly crazy. Yet is there not some fascination in growing a poppy from seed gathered under the statue of Memnon⁴ in upper Egypt, or a scarlet anemone from the fort of Mycene? When I had accomplished both these results, the botanist told me that the poppy was the original great great grandmother of the poppies known in Europe—a primeval type presupposed by all the descendants. But I wonder when the American traveler will be induced to dally over such vanities.

The greater part of northern Greece, including the large island of Negropont, is covered with these Alpine tracts. The west country from the Gulf of Prevesa to Parnassus (the old Acarnania and Ætolia) is indeed hardly visited or known to travelers. There is in the Gulf of Prevesa a splendid site of ruins, where lay Nicopolis, the foundation of the Emperor Augustus, after he won (closely) the battle of Actium⁵ (31 B. C.). He desired to make it a great city, he gave it special privileges, and drafted into it the population of all the neighboring towns, but it never had any further history, though its ruins are fine specimens of Roman building. There is also a spot, over against Patras, celebrated in recent history for the splendid heroism of its inhabitants—Missolonghi, where Byron was struck down and died of fever, when the great new interest of Greek liberty might have purged the dross from that golden genius, and made his later years a career of noble character and public usefulness after the idle splendor of his youth. There is in the possession of Byron's son-in-law, Lord Lovelace, a picture of the poet in Palicar dress, with his white embroidery, his belt full of daggers and pistols, and a magnificence of air which only belongs to such costumes. When looking at this portrait, it is difficult not to exclaim, What an ideal king of Greece he would have made!

You can penetrate into the Phocian Alps by the Gulf of Salona, and go up to Mt. Parnassus, from which most of northern Greece is visible. You can stay at the lively and picturesque town of Arachova, far up the mountain, with a chance of an earthquake every day. You can visit the cave where the brigand patriot Odysseus⁶ made his home, and hid his treasures, and where that wonderful adventurer, Edward John Trelawny, the companion of Byron and Shelley, made his home with the beautiful sister of the brigand.⁷ Here, too, we may find for the first time in this survey, those wild wandering shepherds, known as Vlachs, or Wallachians, who follow the growth of grass down to the valleys in winter and up to the snow line in summer. These people are always considered by the Greeks as a distinct race, and so they probably are. They live almost wholly outside the limits of civilization, and wander armed to the teeth, and protected by fierce dogs, with their wives and children, in gypsy fashion encamping wherever they stop, under coal-black skin tents, and knowing no comforts but absolute liberty, no food but the produce of the flock, no law but their own license, or the superior license of those around them. These are the people who have always been on good terms with the professional bandit of former years, have hidden him in their caves, informed him of his pursuers, and so purchased immunity, if not a share in the booty. A better system of cultivation would close the wide tracts over which they roam, and turn this land to more profitable uses,

and then these people, perhaps twenty thousand in number, must either be got rid of or they would 'take to the mountains' in the technical sense, from the urgency of mere starvation. Here is a problem on a small scale like the domestication of the Indians when American land became too valuable to be left in endless hunting-grounds for buffaloes. For like the Indian, these nomad Vlachs, though I have always found them friendly and hospitable to the traveler, will never be taught the fixed and sedentary life of agriculture. I tried to discover whether they ever intermarried with Greeks or Albanians, but was always told that they did not; my informants speaking of them as an inferior and despised race.

Let us come down into the plains, and so approach the real center of gravity in the Greek kingdom. We have first the great plain of Boeotia, or rather the double plain of Thebes and Orchomenos, of which the latter is badly water-clogged by the marshes of Lake Copais, since the old tunnels made by nature, and renewed by men, are stopped, and no longer carry the water to the sea. This land of Boeotia is exceedingly fertile, and if properly worked would support a population five times greater than at present. It is splendidly watered by rivers coming down from all the surrounding mountains. But the Boeotians carry on their farming, like old Hesiod, our earliest Greek husbandman, without manure, taking in a new field when they think they have exhausted their first. The climate is quite different from that of Laconia or Messene, but if almonds, dates, and cotton will not flourish, maize, vines, and wheat succeed admirably. There are constant schemes for draining Lake Copais, which is separated from the sea northward by a narrow range of limestone hills, with natural outlets through the stone, long since choked up. Such a work would set free some thousands of acres of rich land, and would no doubt lead to some interesting discoveries of ancient submerged villages. But it seems strange to undertake the reclaiming of new land, when the fertile plains are not utilized, so far as they might be. Nor need we hope that this will happen, till a strong and stable government protects foreign capital from the jealousy and the persecution of the natives.

If we cross the rude range of Cithæron and its offshoots, and make our way into Attica, the plain of Eleusis and the large plain of Attica teach us the same lesson. The last time I saw Eleusis, the farming had considerably improved, but even there, and in many parts of Attica, notably about Marathon, rich ground is lying idle within marketing range of the great city of Athens, which is worse supplied with the first necessities of life than any civilized town of its size I ever saw. It is a dear place to live in, and fowls, eggs, vegetables, fresh meat, are all very scarce, for they are brought in, not from the surrounding farms, but by steamers from Salonica, from Turkish territory, and from remote islands. It seems almost incredible that clever and thrifty people like the Greeks, who make such fortunes in trade all over Europe, in London, Manchester, Smyrna, Alexandria, Vienna, cannot see what enormous profits are to be made by supplying their own cities at home.

One possible reason for this curious slackness in the peasants of Attica, is that they are mostly Albanians. This people is now scattered over a great part of northern Greece, occupying almost all Boeotia and Attica, the south of Eubœa, the islands of Hydra, Spozza, and Andros; and most of the country from Argos to Corinth, and several tracts south of Olympia down to the slopes of Tagyetus. It is not easy to be accurate in this statement, for while the Greeks are most anxious to diminish their number, writers who dislike the the Greeks, or were disappointed by them, such as Fallme-

ayer, and even Finlay, exaggerate this element. The highest estimate makes them equal in number to the Greeks, which I do not believe. But it is certain that they occupy large tracts of country, speaking their own language, and keeping apart from the Greeks, though they are good friends with them, and above all profess Greek Christianity. The Albanians who remain in their own country, and profess Mohammed's religion, are loyal subjects of the sultan. Now, though the islands have furnished some brilliant men of Albanian blood to Greece, it is certain that the bulk of the inland peasants are dull, quiet people, occupying their freeholds without ambition, and not desirous of promoting any enterprise. They are not quick and hospitable like the Greeks; they are probably more honest, and certainly more courageous; but they are an element of stolid immovability which, though gradually giving way to Greek influence, is most certainly an obstacle to the agricultural development of the plains which they occupy. Their first invasions date from the seventh century A. D. But the present influx is a gradual one, which has been going on ever since the Venetian conquest, and perhaps has not even now ceased. In 1830, when the Bavarians ruled in Athens, the officials were obliged to know Albanian, and there was an Albanian court to try cases in the language. Now there are still villages, where Greek will not be understood, possibly because they do not choose to understand it, but still it is really a foreign language. The way in which this strange element is being amalgamated, the absence of all quarrels and rivalries between Greeks and Albanians as such—these phenomena are highly creditable to the Greeks, who are the dominant nation. There are on Negropont even a large number of Turks, who remained there after the declaration of Greek independence, and the members of the hated race have dwelt unmolested among their hereditary enemies.

I have no personal knowledge of the plain of Thessaly, inside the Gulf of Volo, as it was not Greek territory when I traveled in northern Greece, and the frontier lands are always unsafe in days of war or political excitement. Since 1881 this rich tract is united to the Hellenic kingdom, and adds another to the agricultural districts which ought to supply and which no doubt has to some extent supplied Athens, for a steamer came from Volo to Athens for years back, and now a railway goes into the interior as far as Trikala (now Meteora). This used to be famous grazing land, and produced an excellent breed of horses, but whether changes of climate and of breed have altered these facts I cannot tell.

I have not given any important place to the rivers of Greece, because none of them are important enough to form highways of traffic. The pathless wilds, a river bed, or the

margin, which is often cleared by floods, may be a convenient track for pedestrians and for mules. But no Greek river is navigable or indeed serviceable for any traffic except perhaps the floating down of timber from the mountains. Most of them are wild streams, which in fine weather insignificant, become dangerous in the winter. Two only I have seen, the Asopus in Boeotia, and the Pamisus in Messene, which though narrow are sluggish and deep. The Alpheus I have forded, not without difficulty, a few miles above Olympia, and yet it is as important as any of them. Thus they though vital to the irrigation of the country—the Cephissus is the salvation of the plain of Attica—the rivers never had any political importance as boundaries or as lines of commerce. The American reader will particularly appreciate this fact, for there are other countries as small as Greece, such as Holland, where the water-ways are of the first importance.

We may conclude this chapter with a few words about the islands, which I had well-nigh forgotten, and which make a considerable portion of the kingdom. A good many of the largest are practically main-land provinces, for they are separated only by narrow straits from the continent. Such are Euboea, Corfu, Cephalonia, Ægina. They generally boast of having purer blood than the main-land, but I do not believe it. There were too many pirates and marauders of very mixed race about these seas to permit any such isolation; and the so-called Levantine is a thorough mongrel, with Syrian, nay with Moorish or Barber, blood not unusually showing in his type. In the outlying islands, of which some are large and fertile, others mere steep mountains rising out of the sea, there is a great deal of simple out-of-the-world life, seeing that many of them only receive a post once a month. They lie scattered all through the Levant, and many of them have a distinguished history, and afford features of interest to the archaeologist. But apart from their agricultural wealth, which is often great, as for example in Zante, the mineral wealth of these Ægean islands is quite remarkable. There is petroleum in Zante, gold in Siphnos, marvelous potter's clay at Kimolo, beautiful variegated marbles in many of them. The volcanic soil of some of them produces excellent wine. Santorin is probably the largest volcano in Europe, and its recent eruptions from under the sea (for the vast crater is usually a basin of sea five miles in diameter) are among the most terrible of these disturbances. The reader who wants to know details about this section of modern Greece should procure my friend Mr. Theodore Bent's book called "The Cyclades." This cultivated man and his charming wife undertook hardships and adventures of no small danger, and of immense self-denial, to explore these by-ways of Greek life.

ALCIBIADES.

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GREEK BIOGRAPHICAL SKETCHES. VI.

The subject of the present sketch, Alcibiades, was intimately connected with the subjects of the last three of these biographical sketches: he was a relative and ward of Pericles; he was the rival of Nicias, and his associate in the generalship; he was the follower and friend of Socrates.

Alcibiades was an excellent representative of the young Athenians of his time. He was handsome, witty, eloquent, ready for any emergency, with extraordinary powers of adapting himself to circumstances, full of generous impulses, brave in battle, magnificent, ambitious to the last

degree, fond of excitement, luxurious, impatient of restraint, without the principle of reverence, unscrupulous, unaccustomed to obey either others or his own better nature. His character and conduct were full of inconsistencies and contradictions. The one trait which appears through the whole course of his life, is ambition,—the desire to be first in everything.

The father of Alcibiades, Cleinias, gained distinction in the battle of Artemisium, fighting bravely against the Persians, with a ship of war which he had equipped at his own expense. He fell in battle when the son was only five years

old. The mother, Deinomache, was one of the Alcmaeonids, the most aristocratic family in Athens. The boy was given into the care of Pericles, who was a distant relative. He doubtless gave Pericles a deal of trouble, but did about as he pleased. Xenophon has handed down to us the account of a quibbling discussion on the nature of law into which the boy led his guardian who at last says that he, too, in his youth enjoyed such tricks.

Alcibiades had wealth, ancient family, honored and powerful friends, and remarkable personal beauty which counted for far more then than it would now. He was the most beautiful youth in Athens, and set the fashions for the whole city. Even his lisp and pronunciation of *r* as *l* were admired and imitated. He was not held accountable to ordinary rules of conduct. It is no wonder that he became capricious, reckless, and wantonly violent. He bewitched the people.

The doings of Alcibiades became town-talk, and we are told that once he cut off the tail of a beautiful dog, for which he had paid more than a thousand dollars (or, more than five thousand dollars, as prices stand now). When his friends remonstrated with him, he said that the people would talk about him in some way, and that if they did not talk of the mutilation of his dog, they might be saying worse things about him!

In his studies, Alcibiades was attentive to all lessons but those in flute-playing. Music was an almost necessary accomplishment of the Athenian gentleman of those times. Alcibiades learned to play the lyre, but refused to distort his countenance by playing on the flute. "Besides," he said, "the flute stops the mouth and prevents a man from speaking. So let the sons of the Thebans play on the flute, for they do not know how to converse!"

So far as we know, Alcibiades was one of the earliest followers of Socrates,—one of the first young men for whom the great philosopher felt a strong affection and for whose guidance he made a strong effort. The friendship between the two was almost ludicrous from one point of view: What community of interest could exist between the most fashionable and luxurious of the "gilded youth" of Athens, and the homely, shabby, and frugal Socrates who was twenty years the older? Yet Plato represents Socrates as more fond of Alcibiades than of any other of his young friends; and shows Alcibiades, on the other hand, as full of personal devotion to his master. The admiration and affection of Socrates is for us sufficient evidence of the youth's promise of future power. Alcibiades was man enough to enjoy the keen frankness—even the frank rebukes—of Socrates, and to contrast this with the flattery which he received from others. But his noble nature was corrupted by his love of pleasure, and perhaps still more by his ambition.

While still a youth, Alcibiades fought at Potidæa by the side of Socrates, who helped him wounded from the field. He received at that time the prize for surpassing brave conduct, but insisted that his friend had as good a right to this as himself. At the battle of Delium, he was among the cavalry and in his turn aided Socrates on the retreat.

Alcibiades was born about 450 B. C., and so was a little more than twenty years old when his guardian, Pericles, died. He lived lavishly and wantonly. He trailed a long purple robe through the market-place, and bore in war a beautiful shield with a cupid as its emblem. He acted as if he were bound by no law. An artist who declined an invitation to paint for him because of other engagements, was seized and held captive until the work was done.

After Alcibiades had wasted most of his own property, he married a rich wife, Hipparete, daughter of Hipponicus, who

brought him a dowry of twenty talents, or more than \$20,000; not a *very* large sum as it seems to us, but the largest dowry on record at that time in Athens. Hipparete became justly indignant at his way of life, and left him. She sought a divorce, but in order to obtain this, she had to apply in person to the chief magistrate. As she was on her way to the office her husband seized her and carried her by force to his home where she remained with him until her death.

The Greeks had few stronger bonds of national unity than their common festival gatherings, of which the most famous was at Olympia, in western Peloponnesus. A victory in the Olympian games was one of the highest honors open to men, and in this fifth century B. C., a victory with the four-horse chariot was more glorious than any other. Horses in Greece were a mark of wealth and luxury. They were not used for menial work. Alcibiades had a large stud, and, in 420 B. C., sent *seven* four-horse chariots to contend at Olympia, and gained three prizes, the first, second, and fourth. The Greeks had believed that the resources of Athens were nearly exhausted by the war, yet now a single Athenian citizen enters for the race a larger number of chariots than any king had ever entered before. Nothing could have done more than this victory to publish the strength of Athens. The event was celebrated in a triumphal ode by the poet Euripides.

When Alcibiades entered public life, he found himself opposed to Nicias, who was leader in war and in counsel. As it had been true of Pericles, it was still more true of Alcibiades, that he took the side of the people—the democracy—not because his nature led him to their support, for he was a born aristocrat, but because only by the help of the people could he secure the ascendancy and power which he wished. He wanted that the people should have all the power, and that they should then commit all to his hands. He desired to follow in the footsteps of Pericles who had been the virtual monarch of Athens, but he lacked his stability of character, his patience and moderation. His family had been on friendly terms with Sparta, but when Nicias gained the glory for the peace which was concluded after the first ten years of the Peloponnesian War, Alcibiades turned to Argos and formed a general Peloponnesian alliance against Sparta.

As soon as the strength of Athens was recruited by a draught of peace, the young Athenians longed for the excitement of war and conquest. They lusted after the corn-fields of Sicily, and dreamed of an Athenian empire which should reach from the Pillars of Hercules (Gibraltar) to the eastern coasts of the Black Sea. Alcibiades seems to have been the leader of the ambitious party, hoping for great glory and wealth for his country, and still more for himself. He and his friends eagerly seized the pretext afforded by a call for help from Athenian allies in Sicily. The most magnificent expedition which the Greeks ever sent out was ordered to Sicily in the spring of 415 B. C., with the design of overcoming Syracuse, and finally the whole island, and then going on against Rome and Carthage. Alcibiades was the real head of this movement, and would gladly have been its sole commander, but the cautious and experienced Nicias and the brave Lamachus were made his associates.

But while the people were in the midst of their preparations for this expedition, on one night the stone columns throughout the city, which were surmounted by busts of Hermes (the god of travelers and streets), were mutilated wantonly. At another time this might have passed for the act of drunken revelers. But at the very last assembly of the people before the time appointed for the departure of the armada for Sicily, a son of Cimon, and grandson of Milti-

ades, accused Alcibiades of being the ringleader of all the impious men in the city, of celebrating a mockery of the sacred Eleusinian mysteries,¹ and of being the head of a conspiracy to overthrow the religious and political constitution of the city. He protested against sending forth such an impious man as leader of the city's forces.

The life of Alcibiades had not been such as to make these charges inherently improbable, but he met them boldly, asserted his innocence, and demanded an immediate investigation. The soldiers were all on his side. His removal from the command would have displeased and disheartened them, and probably would have caused the withdrawal of the Argives whom he had persuaded to join the expedition. His friends were confident, and his enemies cunningly secured a postponement of the investigation, in order (as they said) not to delay the expedition. But hardly had the forces reached Sicily when the dispatch-boat arrived from Athens with the summons to Alcibiades to return and stand trial. His most active and influential friends were away from Athens—on the expedition; his enemies had roused a strong public sentiment against him. He was not disposed to trust his life to an Athenian jury of five hundred, under those circumstances. He left Sicily but went not to Athens but to Argos, where he had strong friends. The Athenians in his absence confiscated his property, condemned him to death, as guilty of high treason, and invoked a solemn curse upon him.

When Alcibiades was told that his countrymen had passed sentence of death upon him, he said, "I will show them that I still live." He obtained from Sparta assurance of personal safety, and went thither. He delighted and charmed the Spartans as he had the Athenians in his earlier years. He adopted their customs and dress, and was the strictest Spartan of them all. He wore his hair short, bathed in the icy waters of the Eurotas, and ate their black broth and barley bread. They believed that he had been misrepresented. In truth, as Plutarch says, he changed color more quickly than a chameleon. "In Sparta he was temperate, grave, and fond of physical exercise; in Ionia, he was easy-going, luxurious, and merry; in Thrace, he was drunken; in Thessaly, he was devoted to horsemanship; at the court of the Persian satraps, he surpassed Tissaphernes himself in magnificence."

Before leaving Sicily, Alcibiades had taken occasion to thwart the plans of his countrymen by making them known to the enemy. Now, in Peloponnesus, he shows the Spartans their own danger. The field of action was remote, but Sparta was to be the prize of Athenian victory in Sicily. He advised them to send their most able general to the assistance of Syracuse, to begin active operations against Athens, and to fortify and hold Decelea, a strong position in Attica, about fifteen miles north of Athens, in sight of the city. No better advice could have been given to the Spartans, and they profited by it. They saved Syracuse and Sicily, and they cut the Athenian land communications with the island of Euboea whence Athens drew a large part of her supplies of food. One third of Attica was under Spartan control. Her fields were useless. Her slaves ran away. Her men were obliged to be on guard both day and night.

When Athens had lost her fleet and two armies, before Syracuse, in 413 B. C., and the enemy was pressing her so hard at home, her condition seemed hopeless. Men looked for her immediate downfall. The Greeks who had remained neutral, now hastened to join Sparta. The Athenian allies, who had been reduced to the position of subjects, were ready to revolt and join either Sparta or Persia. Athens had no

trusted leader, no fleet, no army, and an empty treasury. General despair prevailed at first, but the people rose to the emergency. They were ready to submit to all privations and to meet all dangers.

Sparta had gained much at slight cost to herself, but she was not ready to take advantage of the situation. She had never been a naval power, and had no fleet in readiness to take possession of the islands. She had no clearly defined and well-considered policy of foreign relations. She had no organization fitted to succeed to the inheritance of the Athenian empire. She was never prompt in action.

Alcibiades went to Asia Minor, in order to secure the revolt from Athens of the Greek coast cities and islands. He collected an Ionian fleet and won the favor of the Persian satrap (or governor) Tissaphernes, who subsidized the Spartan ships. The Persians and Spartans were thus united against Athens, and Persia secured a triumph and advantage which she had not won: the most powerful nation of Greece acknowledged her rights to Asia Minor and sued for her help.

But the Spartan leaders became jealous of Alcibiades and plotted against him, and he withdrew to the court of Tissaphernes. There he was admired as highly as he had been in Sparta. He saw that he could no longer expect support from the Spartans, and he feared their successes in the war. So he persuaded Tissaphernes to withhold the supplies which he had been furnishing. As he had taught Sparta what would be most injurious to Athens, he now showed Tissaphernes what would be most fatal to the Greeks as a nation—that they should be exhausted by wars among themselves. Persia's interests demanded that neither of the leading states of Greece should have a decided pre-dominance of power.

By leaving the Spartans, Alcibiades brought himself nearer to his old home. The Athenians had seen what he could accomplish against them, and how great influence he had with the Persians whose gold was likely to determine the issue of the war. They bitterly regretted their action in driving him into the enemy's camp, and desired a reconciliation.

In 411 B. C., an oligarchy of Four Hundred was established in Athens by the political clubs and secret societies which had been recently formed. Intrigues prevailed as never before. Matters pertaining to the government were no longer settled in "town-meetings," but in "caucuses." The army and navy, then at Samos, remained faithful to the constitution and refused to recognize the action of the people at home. They were eager to return at once and overthrow the usurpers. They invited Alcibiades to their camp, and chose him as their leader. With wise moderation he encouraged them, but restrained them from leaving the field of action and returning to enter upon a civil war at home.

After a rule of four months, the Four Hundred were overthrown, and Alcibiades was formally recalled from exile, on motion of Critias, his former companion in study with Socrates. But he did not return at once. He did not choose to return empty handed. He turned the scale of battle in favor of the Athenians and conquered the Spartans in some of the most brilliant engagements of the whole war. He established Athenian tolls at the Bosphorus and regained Byzantium (Constantinople). Then in 408 or 407 B. C., he returned to Athens, after an absence of eight years, accompanied by many captives and the spoils of many captured vessels. The people gave him an ovation, neglecting the other generals. They believed that their disasters had been due to their treatment of him. He had recovered the strength of the city when it was broken. What

might not they hope under his leadership, now that they had regained a fleet! In their adversity they had been prudent and docile; they were now over-confident and as self-willed as ever.

Alcibiades was appointed commander-in-chief of army and navy. The Athenians believed that he could accomplish anything that he desired. Any failure on his part was ascribed to lack of good will and fidelity. But his fleet was not strong nor well supplied with money and provisions. The Younger Cyrus had come from Babylon to Asia Minor and took sides with Sparta, considering the Athenians to be Persia's only true enemies in Greece. The lieutenant of Alcibiades, in his absence, through carelessness and disobedience to orders, suffered defeat. This was charged to Alcibiades, and he was superseded. He withdrew to the shores of Thrace where he had secured and fortified private possessions.

Athens gathered its strength and sent out its last fleet, promising freedom to slaves and the coveted rights of citizenship to the resident foreigners who went forth to fight. The Spartan fleet was nearly annihilated in a battle in which 275 ships were engaged, in 406 B. C. In the "Frogs" of Aristophanes which was put upon the stage in 405 B. C., we see that one of the burning questions at Athens was how they should act toward Alcibiades. A few months later the Athenian fleet is at anchor in the Hellespont, opposite the Spartan fleet, and too far removed from their supplies. Alcibiades appears, warns the commander, and

promises Thracian help. His warning is slighted, the fleet is left unprotected, and of 160 ships only one returns to Athens to tell the story of disaster. The Spartan fleet soon appeared in the harbor of Athens. No resistance was possible. After a siege of five months, the Athenian ships were surrendered, and their walls were destroyed, the right to rule the islands was abandoned—and Greece was brought again under the leadership of Sparta, which was more powerful than any Greek state had ever been before. The government of the Thirty Tyrants was established at Athens and sustained by a Spartan garrison on the Acropolis, for eight months, inflicting dire wrongs on the state and people.

Soon after this disaster, Alcibiades came to a violent death. He was on his way to Babylon, to the court of the Great King, when enemies, public or private, set fire to his dwelling by night and killed him as he leaped through the flames.²

The history of Athens during the active life of Alcibiades is tragic, since it came so near a happier ending. The life of Alcibiades is tragic, since it might have been so useful and glorious. We can only imagine what the result would have been if he had taken the advice of Socrates—if he had been unselfishly patriotic. We can only imagine what the result would have been if he had been allowed to remain in command of the Athenian expedition to Sicily. The lives of few men have been beset by so many vicissitudes. No country ever suffered and gained more from the changing fortunes of a single person than Athens from the fortunes of Alcibiades.

GREEK ART.

BY CLARENCE COOK.

II. SCULPTURE.

The immense productiveness of the Greeks in the field of the plastic arts from an early period, makes it impossible in the small space at our command to do more than offer a few general statements which may serve as hints for young people beginning to take an interest in the subject. The great difficulty up to this time, in the way of students of antique sculpture, on this side of the water, has been the want of any reasonably complete and scientifically arranged collection of casts, for with casts we must be for a long time content. There are not in all America a half dozen Greek marbles or fragments of Greek marbles to be found, and now that the nations on whose soil the mines from which antique remains are dug, have learned their commercial value and are refusing to allow the finds of explorers to leave the country, the hope that our deficiency may some day be supplied, is fast fading. On the other hand, it is much easier now than formerly to obtain casts of even recent discoveries, and it is only a question of whether it be desired or no, for any town or city in America to obtain as large a collection of casts illustrative of the history of antique art as is needed for the purpose of general study, at least. The example recently set by a citizen of the town of Norwich, Connecticut, shows what may be done, where there is a will. Mr. Slater, the wealthy son of a wealthy manufacturer, has provided that town of less than twenty thousand inhabitants with a well-selected collection of casts of antique and Renaissance sculpture—next to that of the Boston Museum, the nearest complete of any in the country—and has also given the town a building expressly designed for holding and showing the collection. Not only this, but to make sure that the work of selection should be well done, he gave to Mr. Edward F. Robinson, the curator of classical antiquities in the Boston Museum,

full power to buy for Norwich what in his judgment the museum ought to contain, thus making of his gift one of the wisest and best rounded that has ever been made in any department in this country and one that is entirely without precedent among us in the department of art.

It is, however, happily true that we are beginning to see a new order of things set on foot in various parts of the country. Boston led the way, Minneapolis followed (getting possession of a fine collection of casts intended for the Metropolitan Museum of New York, but for which there was not at that time room), then came Norwich, and now the Metropolitan Museum has made a handsome beginning in its new building. Meanwhile there have been some smaller collections, by no means to be despised; such as those at Yale College, New Haven, at the National Academy of Design, in New York, and at the Pennsylvania Academy of Fine Arts. And there is every reason to believe that, at no very distant day, we may have at more than one point in our country as ample means for studying the whole history of sculpture—not Greek alone, but that of all nations—as is now to be had in Berlin or in London.

What is needed in the study of any one of the divisions of art is the means of following its development from the rudest beginning up to its highest point, and thence to its decline—for every one of the arts has gone through these phases. We can read about these changes and follow this development intellectually, but the only fruitful way to study the matter is by means of the objects themselves, and this as yet we cannot do, I will not say with thoroughness,—we cannot even make a beginning of doing it here at home. The means of pursuing the study with satisfaction are to be found in Europe, but they are scattered—and after all, is not the labor that is required to collect these rays into one illumini-

inating focus made all the pleasanter by the variety of travel and adventure that accompanies it?

Greek sculpture had as rude beginnings as that of any people. Rough stones, rude pillars of stone, logs of wood, formless blocks, but consecrated to the god by some simple rite, as Jacob made an altar of the stones on which his head was pillowed when he slept in Luz and saw the vision of the angels of God ascending and descending. We read, too, of the natural development of the altar in the case of heaps of stones piled up at the road-side and added to as an act of worship by any passer-by, with the accompaniment of sprinkled oil on occasion—a curious custom by which a pious turn was given to the utilitarian service of road-mending! The stones once collected in sufficient numbers and the work of ridding the road of obstruction completed, what more natural than to place upon it as on a pedestal the image, rude at first and afterward perhaps more finished, of some divinity, Hermes, or Terminus, the god of bounds? Thus in the Odyssey allusion is made to such a pile of stones—a small hill in size, which was called the Hermean hill. The stones set up at the heads of tombs were looked upon as symbols and consecrated as altars—at first rude in shape, later carved into some symbol, and in the end sculptured with elaborate bas-reliefs. So, even to-day among the Turks we find the turban of the deceased placed upon his head-stone—the symbol surviving the long extinct idea that lay at the root.

The lance of the hero, was worshipped for the hero. As we are dealing only with legend we may refer to the mediæval worship of the spear with which Christ was wounded on the cross and which plays such a part in the tales of the Round Table—see Parsifal² kneeling before the spear which he has restored to the knights of the San Greal—all this an inheritance from primeval days. So, says Müller, the scepter of Agamemnon was worshipped, and the trident of Poseidon, and the rod of Hermes.

The next step in the line of progress would be the placing of a head upon the upright block of stone, and the shaping of the block itself into a form narrowing toward the base, suggestive of the general outline of the human trunk and legs. In some cases, instead of arms, projecting pieces of stone were added, on which garlands could be hung at need. This point once reached, the further development was only a question of time; and the direction it should take and the extent of it, rapid in some places and tardy in others, would be dependent upon moral and material opportunities.

Stone was by no means the only material used for these statues. Wood, clay, and metal were employed at different times and in different places, according to the greater ease with which one material was obtained over another, or as particular men developed skill in working it. Thus we hear of Dædalus, probably a mere personification of the word *skillful*, but whether there was a real person of that name or not, the name itself stands as the representative of the sculptor's craft, perhaps chiefly of the workers and carvers in wood. He was the contriver of the Labyrinth in which the Minotaur was confined, and he made the waxen wings by which his son Icarus hoped to fly. So that his legend points to a period of inventions and experiments, for the Greeks had a peculiar faculty for wrapping up material facts in fairy tales. Dædalus gave his name to one of the guilds at Athens—the Dædalidæ, to which Socrates, and his father before him, belonged. But the instruments ascribed to the invention of Dædalus were chiefly such as are used in working wood—the saw, the ax, the plummet, the auger, and fish-glue; and he was credited with devising masts and sails for ships. He was traditionally said to be the father of Cretan art—although Athens was given him as a birth-

place, and some old wooden images of the gods preserved in Crete were ascribed to him, as in Italy old Byzantine pictures of the Virgin were said, and are still said, to have been painted by St. Luke. The guild of workers in metal was called the Hephæstiadæ, from Hephæstus, Vulcan.

" — in Ausonian land

Men called him Mulciber,"—

says Milton, in a splendid passage in the first Book of Paradise Lost, intentionally confounding him with Mammon. Mulciber was one of the names of Vulcan, and means "The Softener," referring us back to that earliest time when men first found the art of softening the metals by fire and plying them to their needs. Homer makes Vulcan not merely the lame and sooty blacksmith of the gods, but the artistic deviser and executor of beautiful things. He devised the bas-reliefs on the shield of Achilles, and by implication the splendid jewels with which Hera adorns herself; he contrived the golden dogs that guarded the house of Alcinoüs, and the golden torch-bearers of his banqueting-hall, and, rising a step higher in the scale, he made for himself those "golden handmaids like unto living maidens, which moved briskly about him; and in their bosoms was prudence with understanding, and within them was voice and strength." The poet in this hyperbole—far surpassing all the conceits of compliment that his tribe have for ages poured out upon the work of the artist—expresses his astonishment at the creations of the sculptors and image-makers of his time.

The legends of these early times are full of allusions to metal statues, and the power of their makers was often attributed in fable to sorcery and to magic arts, much of which is due no doubt to the mystery and gloom connected with working in mines and inaccessible places. Vulcan had his smithy in the underworld, and the idea of the gnomes is connected with the same fable, while the gypsies whose skill in working metal was proverbial, are everywhere popularly supposed to be in league with the infernal powers.

Lastly came the workers in clay who made a vast contribution to the domain of sculpture, although their productions were mainly confined to the service of the household, and to the ritual of the tomb. Small figures of the gods—the greater and the lesser divinities—were made for domestic shrines and altars, and also to serve as votive offerings, while it was the universal custom to put into the tomb with the dead, besides personal ornaments, vases, utensils, and images of baked clay either recalling the person of the departed, or typical of sex and age, or else figures of the gods themselves.

The persistent zeal and industry of excavators have brought this department of sculpture into great prominence and the immense number of these *statuettes* and *figurines* that have been unearthed has extended our conception of the variety, no less than of the diffusion, of the art of sculpture among the ancients. It is only a few years now since the discovery was made in tombs at Tanagra, in Bœotia, of hundreds of small figures in burnt clay, often enriched with color and even with gilding. These little figures, or *figurines*, as we call them—the French word having usurped the name, and one word being more convenient than two—are not always images of the gods, although such are common enough; they rather represent people in real life; women oftener than men, with occasionally a youth, and sometimes children. The costume—and nude figures are rare—is the actual dress of the time, idealized, as is almost universal in sculpture, but making an agreeable and rather startling impression of actuality by certain details that are not met with in what we may call sculpture proper. We seem in these *figurines* to be introduced to a more intimate acquaintance with the private life and social manners of the time;

they give form and body, as it were, to the pictures on the vases, to whose wide, intimate, and varied—in a word, encyclopædic—representation of antique life, we have only lately had popular access, and that only by means of the new process of photo-printing in its different forms. The two new sources of information, the excavations and the vase-paintings, open up a new world to the public at large, however it may be with the few scholars who have devoted their lives to the study; and the *figurines* of Tanagra, and those discovered since in grave-yards at Myrina and other places on the coast of Asia Minor fill to the mind, or help to fill, the gap that had hitherto existed between the prehistoric, the archaic, and the primitive remains, and the richly developed, finished, and world-famous sculptures that stand in the general mind for Greek sculpture.

The *figurines* from Myrina, Ephesus, and elsewhere differ from those found in Tanagra in several points: they are more commonly groups than single figures, and they are far more ornate and romantic in style; the difference answering roughly to differences between the later and the Golden Age of Greek marble sculpture. Doubt has been thrown upon the authenticity of these later groups—a fact which we only mention in passing, without further comment than that in an age so sterile in invention as our own, when almost nothing with an original motive or treatment is produced anywhere, it is wanting in likelihood that any one who could design and execute such groups as these could remain hid or would be content with the occupation of forgery. The possession of such a talent as could produce these incomparably beautiful groups—unlike anything ever seen before, exquisite in poetic feeling, and showing the finest art of composition—would be a fortune to any one who should possess it to-day, and as no attempt has been made to trace the supposed counterfeiter, we are at liberty to believe that we have in these Asia Minor groups a new field of Greek sculpture opened for our delight.

Unhappily we have too few specimens of either the Tanagra *figurines* or the Asia Minor groups in our collections for purposes of study; but in the Metropolitan Museum there is a case containing copies of a considerable number of these objects, made in Berlin and colored and tinted in close imitation of the originals. Whoever will compare even these copies with the stone images and *figurines* of baked clay close by, coming from Cyprus, will have a good illustration of the wide differences that existed between different Greek settlements. The greater part of the Cypriote *figurines* are little better than are produced to-day in Mexico, and at their best they never reached the height of the most indifferent of these figures and groups from Bœotia and Asia Minor.

Many causes have concurred to rob us of the examples of the best Greek art in bronze and marble. To the barbarians who destroyed the Roman empire, the bronze was more useful as metal than as art; but much of the metal-sculpture prized either for its religious character or for its artistic value, was doubtless buried in order to shield it until the storm of invasion should have swept by, and as, when that time came, the Old World had given place to the New, some of these buried pieces were left for us to find, and multitudes are necessarily lost to the world forever by rust and decay.

Occasional examples of this art are unearthed to convince us that the estimate of the excellence arrived at by the ancients which echoes down to us from their own writers and poets was not exaggerated. The bronze statues and busts of Her-culaneum, "The Gladiator with the Strigil," the "Sitting Boxer," and the "Standing Athlete," three magnificent finds of our own immediate time on Roman soil, with a cloud of small pieces of more or less value stored in European museums or scattered through private collections are here to give us some notion of what has been lost.

Of the wooden statues nothing whatever remains; but had the soil of Greece been as dry as that of Egypt, or had she and her colonies been less the prey of ruthless barbarians, something might have been preserved to us answering perhaps to the few wooden figures—one of them now ranked among the masterpieces of the art—and the finer mummy-cases that Egypt has bequeathed us. At first mere blocks chosen perhaps for something suggestive in their shape, then fashioned at top with a doll-like resemblance to a head, and rudely colored, they were clothed and decked with crowns and ornaments, richer and more varied as the community could better afford it, and finally in later times holding somewhat the place in relation to the temple and its worship that is held to-day in Catholic Europe by the doll-like figures of the Virgin which are tended, dressed, and adorned by the pious hands of the devout, and rigged out in finest velvets, silks, satins, and laces, with ear-rings, gloves, necklaces, and crowns, as one may see to-day, not only in southern Italy and Spain, but in dull burgher towns like Antwerp and Strasburg. In another place, these wooden statues become cores, about which were laid ivory and more precious woods than that of which the foundation was made, and this enriched with gold and precious stones, as in the famous example of the Zeus of Phidias. It is not likely however that even the permanent splendor of this array would be allowed by the worshipers to excuse the addition of a rich over-garment on the god's festal day, any more than at Athens in her prime was the statue of the patron goddess of the city allowed to go without the sacred peplum, or cloak, made and embroidered by the ladies of the city, once in every year.

No attempt has been made in these few paragraphs to touch upon the wide subject of Greek marble sculpture in her blooming time. What it really was in beauty and variety we rather guess at than know, since we see it only in copies, and these dismembered, restored, repaired to suit the bastard taste of ancient Rome and Italy, of the Renaissance time or of our own day. Of the hundreds of thousands of Greek statues of all kinds plundered by the Romans and barbarians—Nero alone, for a single item brought 500 statues from Delphi to adorn his golden house—only a handful remains, and these are a wreck, beautiful indeed, but what, compared with their original glory? Still, enough remains in fragments to more than justify the deep admiration of the world of cultivated men and women who give to these ruined monuments of Greek art—and not a single one remains except as a ruin—the palm for beauty over all that has been accomplished since the sun of Greece set forever.

SUNDAY READINGS.

SELECTED BY BISHOP VINCENT.

[March 3.]

The confidence of a power always at work within us, manifesting itself in our powerlessness, a love filling up our lovelessness, a wisdom surmounting our folly, the knowledge of our own right to glory in this love, power, and wisdom, the certainty that we can do all righteous acts by submitting to this Righteous Being, and that we do them best when we walk in a line chosen for us, not of our choosing—this is the strength, surely, and nothing else, which carries us through earth and lifts us into Heaven.

We say to every man, "Believe in the Lord Jesus Christ, and thou shalt be saved," not believe in a distant Christ, not believe in a dead Christ; but believe in the Lord Jesus Christ. Believe in Him as the Lord of your own spirit. Believe that your spirit is as much His servant as you have believed it the servant of the flesh. Believe Him to be mightier than the world around you, than your own flesh, than the evil spirit. Believe and live.

Our folly and our misery is, that we do not ask Him and trust Him to fulfill His promises. They exceed all that we can ask or think. . . . In a little time, when this world and its fashion have passed away from before our eyes, we shall find that it is so. We shall find that we had Him with us all through our pilgrimage: that He was every moment speaking to us, and moving us to do right, every moment warning us of the wrong. We shall find that we have erred in hoping not too much, but far, far too little! If we had hoped more, we should have been freer, and purer, and more loving. We have despaired of God's goodness, therefore it has been far from us.

Very hard indeed it is for a sick person who is tossing on his bed and can find no rest, for a lonely man who has lost himself on the hills at night, to believe that the sun will ever rise. But the sun does rise, and fills the world with his light. So when we feel our own evils, and when we look on all the wrongs and oppressions of the world, we cannot help fancying that the Deliverer is very far away and has forgotten us. But He is not far away; He has not forgotten us. And St. John tells every sufferer, and every man who feels the burden of his sins, how he may find that out. "Abide," he says, "in Christ. . . . Get into the way of asking His help in your troubles: get into the way of asking Him to keep you from doing wrong things and to help you to do what is right."

It is surely a perilous and almost fatal notion that Christian men have less to do with the present than the Jews had, that their minds and their religion are to be projected into a region after death, because there only the Divine Presence is dwelling. Is it possible that this is what the writers of the New Testament meant when they proclaimed that the Son of God had taken flesh and become man, and that henceforth the Lord God would dwell with men and walk with them, and that they should be His children, and He would be their Father? Do such words import that the world in which God has placed us has lost some of the sacredness which it had before; . . . that earth and Heaven are not as much united as when Jacob was traveling to the land of the people of the East? . . . Surely there must be terrible contradiction in such language, a contradiction which cannot fail to exhibit itself in our practice, to introduce unreality, insincerity, heartlessness into every part of it.—*Selections from F. D. Maurice.*

[March 10.]

The talent of music, though in one view not intellectual, is yet in another even the more divinely intelligent. The language of the soul's feeling is in it, and nothing had ever yet any great power over man that was divorced from feeling. This divine principle of music breaks into the style of every good writer, every powerful speaker, and beats in rhythmic life in his periods. Even if he is rough and fierce, as he may be and as true genius often is, it will yet be the roughness of an inspired movement.

The finest fiber of soul and the highest inspiration of feeling can be formed only in some connection, more or less intimate, with a musical susceptibility and nurture. Hence, it is the more remarkable that our universities make so little of music. They labor at the rainbow, and neglect the deeper mystery of the musical octave. They teach the laws of acoustics, but the laws of music, as related to what is deepest and finest in the soul's feeling, they do not attempt. They investigate the crystallization of a salt, but these wondrous and mysterious crystallizations of the air, in the notes of music, they commonly pass by; greatly to the loss, it seems to me, of those who are most concerned to receive what most pertains to the culture of the imagination and the heart.

Some persons have a very decided prejudice against instruments of music, and even fancy that, on that account, they are more spiritual and more strictly Christian in their views of religion. Such a prejudice is greatly hurtful to themselves, because it takes them off in a kind of schism from this part of the worship, and a share in its benefits. Can they imagine that they are borne out in their prejudice by the Scripture? Or have they never read the Psalms of David? What instrument was there which he did not bring into the temple and command to open its voice unto God? Even the trumpets, after a week's battle, must come and change their notes to an anthem of victory. Imagine this great singer of Israel and the vast company of Levites hearing for the first time, in the temple of God, a newly invented organ, such as the instrument now perfected by modern art. They would go forth, saying, "This is the instrument of God"; and so, in fact, it now is the grandest of all instruments as it should be, the instrument of religion. Profane uses cannot handle it.

Let me suggest in this connection, the very great importance of the cultivation of religious music. Every family should be trained in it; every Sunday or common school should have it as one of its exercises. We complain that choirs and organs take the music to themselves in our churches, and that nothing is left to the people. This must always be the complaint, till the congregation themselves have exercise enough in singing to make the performance theirs. Entering, one day, the great Church of Jesus in Rome, when all the vast area of the pavement was covered with worshipers on their knees, chanting in full voice, led by the organ, their confession of penitence and praise to God, I was impressed, as never before, with the essential sublimity of this rite of worship, and I could not but wish that our people were trained to a similar exercise.

I cannot close without carrying your thoughts forward, a moment, to the scenes of the future life. It is sometimes made a question, how far the felicity of the blessed hereafter will consist in this particular exercise of worship. This, at

least, we know, that souls will be organs still of feeling, and if they have great feeling to express, it will be strange if they have not the language of feeling too. As to the sound that shall be used, using the word in our present earthly sense, we of course know nothing, more than of the body that shall be.—From "*Work and Play*," by Horace Bushnell.²

[March 17.]

Family prayer is a natural and necessary acknowledgment of the dependence of families upon God, and of the innumerable obligations they are under to His goodness. The union of mankind in families is ascribed to God, and is a distinguished mark of His loving kindness. "He setteth the solitary in families." "He maketh the barren woman to keep house, and to be a joyful mother of children." The ties of domestic society are of His forming; the birth and preservation of children are eminent instances of His favor and beneficence. It is surely incumbent on families, then, to acknowledge Him in their domestic relation.

Every family is a separate community, placed under one head, and governed by laws independent of foreign control. This sort of society is the root and origin of every other; and as it is the most ancient, so it is bound together by ties the most tender and sacred. Every other social bond in which men are united is loose and incidental, compared to that which unites the members of the same family.

On what, let me ask, does the obligation to social worship rest? Is it not in the social nature by which man is distinguished? It is because we are destined to live in society, and are bound together by mutual wants and sympathies, that it becomes a duty to worship the Creator in a social manner. Man being essentially a social creature, his religion takes the form of his nature, and becomes social.

Supposing the justice of these observations to be admitted, they conclude with the greatest force in favor of the obligation of family worship. Does the duty of social worship result from man's being placed in society? Here is the closest and most intimate society. Is it right that mercies received in common shall be publicly acknowledged; that the interposition of Divine goodness we in common want, should be implored in company with each other? Here is a perfect identity of wants and necessities; a closer conjunction of interests than can possibly subsist in any other situation. In an affectionate and well-ordered family, that quick sympathy is felt which pervades the members of the body; if one member suffer, all suffer with it; or if one member be honored, all the members rejoice with it.

No earthly blessing can befall the head of a family in which its members do not share the benefit; no calamity can befall him without spreading sadness and distress through the household. Whatever is suffered, or whatever is enjoyed, extends its influence through the whole circle. Whoever, consequently, reflects on the true foundation of social worship must perceive that the arguments which evince its propriety apply to the worship of families with still greater cogency, in proportion as the ties of domestic union are more close and intimate than all others. Family religion is the natural result of the social nature of man, when sanctified by Divine grace; that it is, in truth, a most important branch of social religion. Viewed in that light, it is clearly comprehended within the extent of the injunction, of "praying always with all prayer and supplication in the spirit, and watching thereunto with all perseverance."—Robert Hall.³

[March 24.]

A household in which family prayer is devoutly attended to, conjoined with the reading of the Scriptures, is a school

of religious instruction. The whole contents of the Sacred Volume are in due course laid open before them. They are constantly reminded of their relation to God and the Redeemer, of their sins and their wants, and of the method they must take to procure pardon for the one and the relief of the other. Every day they are receiving "line upon line, and precept upon precept." A fresh accession is continually making to their stock of knowledge; new truths are gradually opened to their view, and the impressions of old truths revived. A judicious parent will naturally notice the most striking incidents in his family in his devotional addresses; such as the sickness, or death, or removal, for a longer or shorter time, of the members of which it is composed. Has a pleasing event spread joy and cheerfulness through the household? It will be noticed with becoming expressions of fervent gratitude. Has some calamity overwhelmed the domestic circle? It will give occasion to an acknowledgement of the Divine equity; the justice of God's proceedings will be vindicated, and grace implored through the blood of the Redeemer to sustain and sanctify the stroke.

When the most powerful feelings and the most interesting circumstances are thus connected with religion, it is not unreasonable to hope that, through Divine grace, some lasting and useful impressions will be made. What can be so likely to impress a child with a dread of sin, as to hear his parent constantly deprecating the wrath of God as justly due to it; or to induce him to seek an interest in the mediation and intercession of the Savior, as to hear him imploring it for him, day by day, with an importunity proportioned to the magnitude of the subject? By a daily attention on such exercises, children and servants are taught most effectually how to pray. Suitable topics are suggested to their minds; suitable petitions are put into their mouths; while their growing acquaintance with the Scriptures furnishes the arguments by which they may "plead with God."

May I not appeal to you who have enjoyed the blessing of being trained up under religious parents, whether you do not often recall with solemn tenderness what you felt in domestic worship; how amiable your parent appeared interceding for you with God? His character appeared at such seasons doubly sacred, while you beheld in him, not only the father, but the priest over his household; invested, not only with parental authority, but with the beauty of holiness.

Where a principle of religion is not yet planted in the young, family prayer, accompanied with the reading of the Scriptures, is with the Divine blessing, the most likely means of introducing it. Where it already subsists, it is admirably adapted to cherish, strengthen, and advance it to maturity; in the latter case it is like the morning and the evening dew at the root of the tender blade.—Robert Hall.

[March 31.]

I proceed to notice a few of the probable pleas which will be urged for the neglect of this duty.

(1.) The most probable I can think of is want of ability. To this it would not be easy to furnish a reply, did it absolutely require a degree of ability above the most ordinary measure. They who urge this plea may be conscious of their incapacity to become the mouth of others in extemporary prayer, but this is by no means necessary. Excellent forms, expressive of the wants and desires of all Christian families, may be obtained, which, supposing the inability alleged to be real, ought by all means to be employed. We, as dissenters, for the most part use and prefer free prayer. But God forbid we should ever imagine this the only mode of prayer which is acceptable to God.

The plea of mental inability will not stand the test of an

examination, unless it include an incapacity to read ; a case comparatively rare, and which we hope is continually becoming rarer, and applies to few instances of the neglect we are complaining of.

It is more than probable that those who complain of this inability have never made the trial, and consequently can never form any accurate judgment of their qualifications. Were you to make the attempt, beginning with the use of a form if absolutely necessary, and making variations and additions as your feelings may suggest, you would find the accomplishment of that gracious promise, "They that wait on the Lord shall renew their strength."

(2.) Another class of persons are ready to admit the propriety and utility of this practice, but allege that such is the variety and multitude of their worldly vocations, that they cannot spare the time requisite for this exercise. Five minutes will suffice for reading an ordinary chapter ; not many more for the utterance of a fervent prayer ; so that the exercise, morning and evening, need occupy little, if anything, more than half an hour. And is this a space too much to be allotted, in the most busy life, for an exercise so sacred in its obligation, and so replete with advantage ? Where is the man so incessantly occupied as not to allow himself more leisure

than this, frequently, if not habitually,—that does not allot more time to objects of confessedly inferior magnitude ?

Consider for a moment on what principle does the plea of want of time depend. Plainly on this : that religion is not the grand concern, that there is something more important than the service of God ; that the pleasing and glorifying of our Maker is not the great end of human existence.

(3.) Another class will perhaps reply, "We are convinced of the urgent obligation of the duty which has been recommended ; but we have so long neglected it that we know not how to begin,—are ashamed at the prospect of the surprise, the curiosity, it will occasion."

But there is much impiety in this shame ; and if it be permitted to deter you from complying with the dictates of conscience and the commands of God, it will unquestionably class you with the fearful and unbelieving, who shall have their portion in the second death. To be ashamed of the service of Christ is to be ashamed of Christ and His Cross ; and you have heard the Divine denunciation of judgment on such characters : "Whosoever shall be ashamed of Me and of My Words in this adulterous and sinful generation, of him also shall the Son of Man be ashamed when He cometh in the glory of His Father with the holy angels."—*Robert Hall.*

COLOR IN THE ANIMAL WORLD.

BY THE REV. J. G. WOOD.

PART ONE.

I have always held that in all color there is "more than meets the eye," and that this aphorism has a special force with regard to animals. Why, for example, should many races of mankind vary as much in the permanent and transmissive hue of the skin as in the conformation of the features and the character of the hair ? Climate and geographical position have no part in this variation of color, for we find differently colored races living under precisely similar physical conditions.

Descending a few steps in the scale of creation, we may ask the same question respecting the lower animals. Two solutions of this problem are generally offered, one being that certain hues enable the animal to conceal itself from its enemies, and the other, that brilliancy of color in the male is intended to attract the opposite sex. To some extent each of these solutions is correct, but they are by no means of universal application.

Applying the first theory to man, it is a well-known fact that color does in many cases serve as an aid to concealment. A dark-skinned savage, for example, can effectually conceal himself in a spot where no white man could be hidden for a moment. Ignorant critics often sneer at the humiliation of employing disciplined troops armed with the newest instruments of modern warfare against a set of black-skinned, naked semi-savages, armed with no better weapons than rude spears of their own manufacture. These dictators of the writing desk have had no personal experience of savage warfare. They do not know that the black skin and naked body constitute the chief strength of the savage warrior, or that in bush-fighting, where military tactics are impossible, the assagai is far more formidable than the rifle.

Not being encumbered with clothes, accoutrements, or commissariat, and carrying nothing but a bundle of light spears, the savage can traverse with ease and quickness, a tract of bush through which the heavily laden soldier cannot force his way without cutting it down. Moreover, the savage can

lie in it so closely concealed that the soldier who is hunting for him may pass within six feet of him and fail to detect him. Thus it was that the Prince Imperial of France lost his life in the Kafir war. A strong body of Zulus was hidden within a few yards of the little open spot upon which the Prince, ignorant of savage tactics, actually called a halt, and ordered his party to off-saddle.

An experienced savage warrior, in an emergency, can conceal his dusky limbs in a tiny bush that hardly seems large enough to hide a rabbit, and if no bush should be at hand, a few stones will serve the same purpose. In such warfare, a rifle which will kill at a range of two thousand yards is useless against a foe who may be near enough to be touched, but persistently keeps out of sight. Moreover, at the distance of a few yards, the assagai is the most deadly of weapons. Even while lying on the ground a Kafir with a sort of underhand jerk, can propel his weapon with a certain aim and with deadly force. There is no report, and no smoke betrays the position of the thrower, who, as soon as he has struck his foe, glides off like a snake, and seeks a new ambush. In the late Ashantee war the chief difficulty lay in the fact that it was scarcely ever possible to obtain more than passing glimpses of the black-skinned enemy who was firing at the English soldiers from the dark shadows of the bush. The Ashantee warriors knew better than to venture into open ground. They hung on the flanks of the advancing army, and kept up a close and galling fire from a distance of only a few feet, their dark bodies being quite invisible in the bush.

Even when surprised in the open country, the dark savage is at no loss for modes of concealment. For example, the Australian "blackfellow" will suddenly squat on the ground, cover his crouching body with his mat, and hold one of his long spears upright. In this position he looks so exactly like the "blackboy" bush, that the enemy when in pursuit might pass within a few yards without detecting the imposture. In Africa and India there are certain tribes which em-

ploy a still more ingenious mode of concealment, or rather of deception, their dark color being an indispensable adjunct to the stratagem. When they go on their marauding expeditions, they dispense entirely with clothing, and carry nothing but their simple weapons. Mr. Mansfield Parkyns, who lived for a long time in Abyssinia, was on one occasion completely deceived by some marauding Barea, a tribe which is a very thorn in the side of the more civilized Abyssinians. He was traveling over a plain which had shortly before been devastated by a bush fire, when his guide suddenly warned him of the presence of the Barea. "All I saw was a charred stump of a tree, and a few blackened stones lying at its foot. The hunter declared that neither the tree nor the stones were there the last time that he passed, and that they were simply naked Barea who had placed themselves in that position to observe us, having no doubt seen us for some time and prepared themselves." Not believing the guide, Mr. Parkyns ordered his party to move on slowly while he dropped into the long grass with his rifle, and crept toward them. When he was within long range he fired a shot at the disputed object, and was considerably startled at the result. The tree came to pieces and ran away, while the logs and stones jumped up, took to themselves legs, and made after their comrades. "I was never more surprised in my life, for so complete was the deception, that even up to the time that I fired, I could have declared that the objects before me were vegetable, or mineral,—anything but animal. The fact was that the cunning rascals who represented stones were lying flat with their little round shields placed before them as screens." A still more ludicrous instance of deception took place in India. An officer was surveying the country, and, finding his helmet uncomfortably heavy, he hung it on a branch of a tree-stump close to where he was standing. To his unutterable surprise, the tree suddenly turned a somersault, and shrieking with laughter, went off with the helmet. The fact was that the seeming branch was the leg of a savage marauder. The man was standing on his head, and had disposed his legs in such a manner that, aided by his spears, which did duty for the smaller boughs, he had completely metamorphosed his dusky body and limbs into the semblance of a dead tree-trunk.

Let us now pass to some of the lower animals.

It is easy to understand that the lion can elude observation even on open ground, his tawny fur coinciding in color with the hue of the objects which serve as a background. A remarkable corroboration of this invisibility occurred to a friend of mine when she was a young girl living in New York. In those days there was on the outskirts of the city a large sandy space, which was in much favor with the children as a playground. Early one morning she went to the ground as usual but found it deserted, and seeing a little hillock of sand ran up to it with the intention of ascending it. Just as she reached the hillock, it suddenly rose up in the form of a lion. The girl was too startled to move hand or foot, and the lion, evidently bewildered with his freedom, walked away. The lion had escaped from a menagerie, and was recaptured before he had done any mischief. He was evidently asleep when the girl ran up to him, and she told me that if he had not moved, she should certainly have jumped on his back. In the dusk of evening the lion is absolutely invisible, so that, according to every African hunter, a party of lions will prowls all night round a camp, and in spite of the indications which are given by their roars, will elude the eyes of the most practiced hunter, so that he can see no object at which to aim. In a similar fashion the puma will dispose its body on the branch of a tree in such a manner that even when attention is drawn to it, an inexperienced eye will fail to detect it.

But when we come to the giraffe, we cannot at first understand that the size, height, and bold coloring which make it so conspicuous on open ground, should become its most effectual means of concealment when among trees. The animal feeds mostly upon the leaves of a species of acacia (called by the Boers "kameel-dorn," or giraffe-thorn) stretching its long neck among the branches, and with its lithe, slender tongue plucking the pendant leaves from the twigs. When it is standing among the acacias, it can with difficulty be distinguished from them, its long slender legs resembling the trunks, and the head and neck being lost among the branches; while the spots which are so conspicuous in the open country, harmonize so faithfully with the broken patches of light thrown by the leaves, that even the huge body is indistinguishable at a little distance. Not even the native hunters, with their highly trained vision, can decide whether a little clump of three or four acacias be tenanted by the giraffe or be empty. Even a telescope or a field-glass will fail to ascertain the presence of the giraffe. The anaconda also can lie unseen in the forest, the beautiful diamond-shaped patterns of the body resembling the lichens, mosses, and fleckings of light and shade upon a tree-trunk. So close is the resemblance, that a man has been known to seat himself on the body of a gorged and sleeping anaconda, mistaking it for the object which it simulated. Similarly, the spotted jaguar of the New World, and the leopard of the Old, are practically invisible among the branches of trees, and depend on this fact for their ability to capture the wary and active monkeys.

Then, there is the tiger, with its beautifully striped body and limbs. Look at a tiger in a menagerie, and you will think it a very conspicuous animal. But look for it in its native jungle, and though it may be within two yards, you will with difficulty detect it. Col. J. T. Norgate, an old and experienced tiger hunter, wrote at my request a description of the ordinary surroundings of the tiger:

"Do you want an attempt to describe the Indian jungle?"

"First, long, dry grass with spears at the end which stick to your clothes like fish-hooks, the leaves cutting your hands like razors. Then, numbers of creeper ropes cunningly designed to throw you down, strong as four-inch rope, and able to hold an elephant. Mix all these with thorns of any length and any strength, some being capable of piercing half-inch shoe-leather. Shrubs of every conceivable shape, long leaves of a yard in length, round leaves four feet in circumference, soft, hard, and rough. In the midst of these you will most likely see the stripes of the tiger which moves about like an oiled demon, appears like a sprite, and disappears like a spirit. It sneaks along like a snake, making no noise. I have always found the tiger to appear like a ghost, i. e. when you least expect him. In a moment you see a long row of stripes before you in the jungle, but you never see the whole animal."

Those of my readers who have only seen the elephants in a menagerie or at the most in the open air, can scarcely realize that when it is among trees it is practically invisible. I have not personally enjoyed the good fortune of seeing—or trying to see—the elephant in its native woods, but I have met many who have done so, and their testimony is unanimous. You may be so close to an elephant that you might touch him with the barrel of your rifle, and yet be unable to detect his presence. An inexperienced hunter has been known to pass close to a herd of elephants, and be fully convinced that not an elephant was to be found within miles. Even the great legs of the animal look so exactly like the trunks of the forest trees that it is quite impossible to distinguish the one from the other.

Similarly, crocodiles, in spite of their dimensions, are often able to escape observation in consequence of their resemblance to floating tree-trunks, and are thus not only enabled to evade their enemies but to approach their prey unobserved.

Still keeping to the reptiles, the celebrated chameleon is well-known for the incessant changes of color to which it is liable. There is, however, one popular error regarding this reptile, namely, that it always alters its hue to that of the object on which it is standing. Now, I have made many careful experiments with the chameleon, extending over a space of several months, and have found that although it does sometimes accommodate itself to the hue of surrounding objects, it does not do so invariably. For example, it more than once made its escape, and gave me infinite trouble before I found it. After the first escapade I fastened a little streamer of scarlet braid to one of its hind feet; and it was fortunate that I did so, as had I not taken that precaution, it would certainly have been lost. It lived on a branch fastened to the back of my desk, so that it might always be in sight, and might be accustomed to my presence. Its normal color seemed to be a grayish black, as it always retained that hue longer than any other. Toward evening, green was the prevailing hue, but as a rule, it was seldom of the same color for two consecutive minutes. Yellow was another of the predominant hues, and always made its appearance in circular spots about as large as mustard seeds, or in bands around the limbs, or in broken lines on the body and head—never extending over any considerable amount of surface. Lastly came a rich Vandyke brown, the effect of which in juxtaposition with the other colors, especially the yellow, was very striking. I never saw any colors except these. On one occasion, when in the garden on a fine autumnal morning, I placed the chameleon on a branch of a little birch tree, and then walked round the lawn. When I came to the tree, the chameleon had vanished, and for some time I thought that it had escaped. After a time, however, I espied the scarlet streamer hanging from one of the topmost branches, and by

its aid discovered the chameleon, which otherwise I should have overlooked. It had gathered itself into a sort of bunch, while its sides were bright green, and a stripe of dark brown ran along its spine, the hues being exactly those of a withering birch leaf.

Excitement of any kind, especially that which was produced by the buzzing of a fly, invariably evoked the brown markings, while the proximity of scarlet always caused its body to be covered with yellow spots, while the legs were surrounded with rings of the same hue. It soon became accustomed to the scarlet streamer, and was not affected by its presence. Sometimes I put it down on the ground so that it was obliged to pass over objects of different colors. As long as it remained on the grass it was mostly yellow and brown, but as soon as it came upon the gravel-path, the hues faded into blackish gray. The change was so instantaneous that as it walked from the grass to the gravel or *vice versa*, the front part of the body would be of one color and the remainder of another. Sometimes the whole of one side would be green and the other side black, while on some occasions it would be striped with brown like a zebra, and have its head covered with longitudinal streaks of the same hue.

The strangest point in this frequent change of color is, that it is independent of the will of the animal. This fact was proved in an unexpected manner. In a fit of jealousy my pet cat killed the chameleon. I laid it on my desk, and was surprised to find that for some time it continued to change color quite as often as it did during life. It is also evident that the change of color is not intended wholly for protective purposes, as the animal does not always assume the hue of surrounding objects. Moreover, it changed its colors after death, when it needed no protection.

Even the common frog (*Rana temporaria*) is capable of accommodating its color to that of the soil on which it takes up its temporary residence. The change is not nearly so complete as in the chameleon, being limited to brown and yellow. But it is sufficiently complete to alter the whole aspect of the creature, and indeed to destroy its identity.

INDUSTRIAL AND SOCIAL EFFECTS OF THE SEWING-MACHINE.

BY ERNEST INGERSOLL.

The sewing-machine in each house and the factory in every village and city, are two of the most familiar facts within the ken of the present generation, and few stop to think how, to a great extent, they are each the product of the other. It is perhaps too much to say that our industrial progress owes more to the sewing-machine than to any other single agent; yet one who argued from that standpoint might find many facts to stand upon. To this invention, in its multifarious applications, is due the existence of the whole factory system, as opposed to piece-work at home, in the making of every article of wearing apparel and of a multitude of other things; to it can be traced the possibility and origin of scores of lines of modern artifice; and the utilization in many ways of materials previously neglected. To it, furthermore, is due a demand for an amount, an elaboration, and a variety, in every branch of domestic production, which formerly had no existence, because then impracticable of supply. While a new call in trade usually meets with response, new powers and resources invariably develop a demand to previously unsuspected proportions.

Hence a comparison of the cost of production of articles made before the invention of the sewing-machine with those

made now by means of it, is feasible in very few cases, and even there it is misleading. Take, for instance, a woman's dress. A good seamstress, fifty years ago, might, perhaps, make a dress in a day, with the assistance at home of the person who was to wear it. But how simple and plain was that dress in comparison with one for the same purpose made to-day! The thousand ornamentations, drapings, and trimmings now thought indispensable to rich attire, were unknown then, or, if attempted, were attended by a cost which put them beyond any but a few very rich. Moreover, in those days, when a seam was made, that was the end of it. Now many seams must be sewed repeatedly in fancy patterns. I saw an overcoat to-day in which, for a width of six or eight inches back from the front, the silken lining was quilted with hair-like lines of stitching a quarter of an inch apart. This was unnecessary to strength or warmth, but it was beautiful, and every finely made coat must have it. In other words, the introduction of the power to sew cheaply in a great variety of ways has led to a vast amount of additional sewing; and in all but the simplest underwear (even in much of that) the actual number of stitches now put into every garment is from twice to ten

times as many as when those things were made by hand.

And what a limited amount of hand-sewing is now done by the women and girls of the family in comparison with former days. A regular sewing task and pride in good needle-work are no longer general feminine accomplishments. It is almost a lost art. Who ever thinks of making collars and cuffs at home, for example? How rare is it to find even men's shirts made by their wives and sisters. My wife was told by her mother that before she married she must learn to make a shirt. She did so, and I was condemned to wear the product, but she has never made one since. In or near cities, at least, very little underwear is now made by hand. You can buy in New York or Chicago to-day such things of good quality at these prices: man's night shirt, \$1.25; woman's night dress, \$1.45; plain skirt, 60 cents; well-trimmed skirt, \$2.50; corset cover, 60 cents; ordinary drawers, 75 cents. Often far cheaper quality and prices can be had, while elaborately trimmed ones will cost more; but there are few instances where, not to speak of the cost of material, the time of the housewife is not worth more for use or enjoyment than to be spent in making these things herself. Yet it does not appear that more suffering belongs to those, as a whole, who, under organization, with the help of machinery and by the swiftness of skill are able to turn out these garments so cheaply, than would have been their lot had not the machinery been invented.

The history of the introduction of the sewing-machine in England, where it obtained a foothold in the factory business (for which at first it was wholly intended) before it could do so in America, is a good illustration of the beneficent change it brought about. The first people to take it up were the London stay, or corset, makers. In those days stays were made almost wholly at their homes by women who lived in the East End of London and in the slums of other English cities. They were numbered by thousands, dwelt in squalor and under most unhealthy conditions physically and morally. The very name *stay-maker* was a synonym of all that was poverty-stricken and degraded in woman-kind. The sewing-machine changed all this. The women found that it required a little more skill, but that industry was far better rewarded. Hence the worst of them were weeded out. The employers discovered that to work economically their operatives must be assembled in large rooms, where many machines could be propelled by the same motor. Light was needed. This meant windows and abundant air. The great factories which sprang up in this (and presently in many other trades), were far healthier than the dark, dirty lodging-rooms of Whitechapel or the purlieus of Glasgow and Sheffield. The required discipline, steady work, and better pay were morally helpful, and the trade of a corset maker was elevated to a level with other industries, and to profess it required no apology.

What has been said of feminine clothing, is equally true of masculine. The sewing-machine goes into all the departments of tailoring; and the trade in ready-made clothing is a direct outgrowth of it, since without the sewing-machine it would have been impracticable to keep up the immense quantities required to stock the thousands of salesrooms.

It is said that a coat can now be made in 2½ hours which by hand would require 16½ hours; and a shirt in 1¼ hours which it would cost 14½ hours of hand work to stitch together. A factory hand will make seven linen waist-coats while a tailor is sewing one. "One girl," remarks Parton,¹ "can do as much sewing by machine as ten men can do by hand. . . . In the truss and bandage business, which is one of very great extent and importance, one machine is equal to ten women. . . . In mere hemming, on a ma-

chine fitted expressly for the purpose, one machine does the work of fifty girls. The sewing-machine is one of the means by which the industrious laborer is as well clad as any millionaire need be, and by which working girls are enabled safely to gratify their woman's instinct for decoration."

If one person can make as many caps or surgical bandages as ten, that releases nine for other employments; and in a country whose resources were undergoing development, as has been the case in the United States, there is always enough to do for the hands released. They at once began to coin original wealth by utilizing for market the outcome of mines and forests and newly plowed soil. Their market was as large as before, but clothing, harness, and a thousand articles of daily use became cheaper than before. Hence each dollar went further and prosperity grew. There is no doubt that the introduction of the sewing-machine was a powerful factor in assisting us to recover from the well-nigh fatal panic of 1837.²

Furthermore, it would seem that this invention greatly helped save the country twenty-five years later, since it would not have been possible to keep a million of men in the field year after year had not the sewing-machine been in service to make their clothing and shoes, blankets, tents, and a large part of their equipments. It is related that one day during the Civil War, an order from Washington reached New York at 3 p. m. by telegraph, for 50,000 sand-bags, such as are used in building field fortifications. By 2 o'clock the next afternoon the bags had been made, packed, and started southward.

No trade has been more thoroughly reorganized by the sewing-machine than that of the shoemaker. It is most instructive to read John Plummer's³ account of how this began in England, at first with the opposition, but very soon with the welcome, of the Crispins.⁴ Half a century ago foot wear was made wholly by cobblers sitting in musty little home-shops, two or three together, bent over their tasks in semi-darkness and dirt. Every operation was by hand, and in Europe boots were so expensive that the peasantry wore clogs and wooden *sabots*, not because they liked them, but because they could not afford leather. Now a cobbler's work is mainly repairing or fitting irregular feet, and the great bulk of the foot wear of Christendom is made in huge factories where almost every detail is effected by machinery. The thickest sole-leather yields to the steam-driven needle and thread.

There is, in fact, nothing in the way of stitching which some form of this machine is not able to do. It executes, under the control of an artist, embroidery equal to the famous old Flemish tapestry,⁵ and attaches the finest lace to the most gauzy fabric without harm. It seams, hems, tucks, binds, quilts, gathers, fells, braids, and makes button-holes. It sews carpets together, binds pamphlets, makes fire-hose, all sorts of harness, leather, and canvas (sails) work; and the Singers furnish a machine, weighing 2,600 pounds, for stitching the canvas-and-rubber belting used in driving machinery, by which that article has been at once cheapened and improved. Nothing has yet been asked of the sewing-machine which it has not proved capable of doing as well as, and generally better than, it had before been done by hand; while in many directions it has outstripped hand-work, and originated entirely new branches of industry. If it was true twenty-five years ago, as Professor Renwick⁶ is reported as saying, that the United States then saved nineteen millions of dollars in labor annually, what amount would represent the labor saving now?

There is another important way in which the sewing-machine has proved influential in the industrial develop-

ment of the country—the manufacture and sale of the article itself, together with the new needles and kinds of thread required. This has done more than simply to erect huge buildings and furnish employment to an army of persons. (It is estimated that at least 20,000 men and women find work in making these machines, not to speak of the thousands whose livelihood is gained by selling them, their disposal now costing the manufacturer as much as their making.) It has been a channel for the advancement of mechanical ingenuity in the elaboration of labor-saving contrivances in a remarkable degree. The idea of interchangeable parts in apparatus of which a great number was to be made, emanated from the fertile brain of Eli Whitney,⁷ the inventor of the cotton-gin, who first applied it to fire-arms in his factory at New Haven. But that was just the moment when the manufacture of sewing-machines began, and makers were quick to see its advantages and the whole system soon became known as the "sewing-machine method" in mechanics, and spread rapidly. It is believed by those who know best, that competition between rival sewing-machines, stimulating inventors to continually produce machinery in the factories which would most perfectly and cheaply turn out their complex and delicate attachments, has been the most fruitful school in America for inventive mechanical skill; and that from no other trade has the general field of labor-saving mechanics derived so many hints and improvements. The list of new applications of tools and machinery, originally devised for fashioning some part of a sewing-machine, is a very long one; and when it is remembered that in making some single parts of a household machine two hundred operations have to be performed, an idea of the complexity of the apparatus concerned may be conceived. Workmen in these factories no longer call themselves machinists but tool-makers. Many of the most complicated machines can be tended, two or three at a time, by mere boys. This is a source of complaint, from one point of view, which regards it as the destruction of skilled labor; but a better view is, that the man is left to find elsewhere the place in which, as yet, he is indispensable.

This introduces, of course, that great question whether the army of sewing women, tailors, shoemakers, etc., are really better off now than before. There is no doubt that in many branches of production wages are excessively low; but would they have been any better—would life have been any easier for these classes of working people—under a continuance of the old system? All that we can learn from history and statistics says, *No*,—asserts, on the other hand,

that, taking the world together, the factory, machine-aided, system has worked for the benefit of the employed as well the employer; and that in no direction has this been more marked than where the sewing-machine has been the principal factor in the change. Space will not permit an enlargement on this point; but it will be interesting to read Mr. Carroll Wright's remarks⁸ on how factories have elevated in intelligence and efficiency the English working classes, and have conducted to general education. The book trade of London rises and falls with the prosperity of the cotton mills of Lancashire and the shoe shops of Leeds.

I have made fruitless efforts to ascertain how many sewing-machines are annually sent to market in the United States. No trustworthy statistics are available. One of the oldest and largest companies showed me their record for several years past, and this credited them, some years ago, with over 300,000 in a single year; but the present product is somewhat less. The best opinion gives about 1,500,000 as an estimate of the total annual production of complete American machines at present. Four fifths of these are sold within the United States, and the other fifth is exported to all parts of the world. Australia and South America derive their supply mainly from the United States direct. Europe is supplied largely by foreign manufacturers, but it is universally conceded that in mechanical accuracy, durability, and general excellence, American machines are easily ahead of European. This is true even of those made at factories where American methods and machinery (copied) are in vogue, and under the superintendence of foremen educated in this country; and—still stranger—it is true even of the machines made in Great Britain by branch factories of American companies. The explanation is found in the fact that the European workman is neither so intelligent nor skillful as the Yankee "hand"; it is needless to look much further for a reason why their wages are less.

The patents covering the broad idea of machine-sewing have now expired, and the privilege of manufacture is open to all. But each different machine is protected in its peculiarities and attachments by a score or more patents upon small parts, while hundreds of patents apply to the apparatus and tools used in making these parts. Factories are now found in all parts of the Union, including the South and the Pacific coast, but the largest capital engaged is still clustered in Connecticut, New York, and New Jersey.

In the mere glance at a great subject which so brief an article allows, I can do hardly more than make assertions, but these indicate a line of discussion and inquiry.

THE CARE OF CRIMINALS.

BY THE HON. Z. R. BROCKWAY.

Gen'l Supt. of New York State Reformatory.

The sure and steady increase of the number of imprisoned criminals demands and should enlist our attention to their proper care. The United States census of 1880 shows an increase of prisoners, out of proportion to the growth of population, as follows:

In 1850 there was one prisoner to every 3,445 of the population.
" 1860 " " " " " 1,649 " "
" 1870 " " " " " 1,172 " "
" 1880 " " " " " 0,855 " "

The aggregate of prisoners in June, 1880, was 70,077, and without including juvenile delinquents the number is 58,609. If from this number there be deducted prisoners confined in work-houses, houses of correction, jails, military prisons,

hospitals for the insane, prisoners leased out to private firms or individuals, numbering 17,940, we have, confined in the penitentiaries, 30,659.

The present generation can scarcely know that the treatment of criminals by imprisonment in penitentiaries is of comparatively recent origin, almost within the present century. The horrors, abuses, and errors of the then existing criminal codes and penalties in the latter part of the eighteenth century led to an attempt to moderate some, to abolish others, and generally adjust the punishment to the offense, and for this purpose penitentiaries were provided; that at Philadelphia in 1790, the New York Penitentiary in 1796, other states following, as Massachusetts in 1800, Ver-

mont in 1808, Maryland in 1811, New Hampshire in 1812, Ohio in 1816; and at about the same time New Jersey, Tennessee, and Kentucky erected penitentiaries.

The prisons or jails for detaining prisoners were, previous to the penitentiaries, both in Europe and America, of the rudest and worst construction and management. The Newgate Prison of London, England, and the Newgate of Connecticut are types of these jails. The London Newgate is more than seven hundred years old; all classes of criminals were confined there in almost indiscriminate association. Those only committed for trial; those actually convicted; hardened and first offenders; the profligate and the evil disposed; the innocent and the guilty, were indiscriminately mingled together in idleness, as we are told by Sir Richard Phillips, one of the sheriffs. Mrs. Fry says she found the female side in a situation which no language can describe. Nearly three hundred women of every gradation of crime, some untried, some under sentence of death, were confined together in two wards and two cells, sleeping, nearly naked, on the floor, a hundred twenty in one ward, without mat or bedding. Mrs. Fry says she saw them openly drinking spirits and heard the most terrible imprecations, and that everything was filthy to excess. The report of the inspectors, as late as 1832, declares, "If human ingenuity was tasked to devise means by which the most profligate of men might be rendered abandoned to the last degree of moral infamy, nothing more effectual could be invented than the system now [then] actually in operation within the walls of the first metropolitan prison in England."

The American Newgate at Simsbury (now East Granby), Connecticut, was formerly, as early as 1707, a copper mine over which rude prison buildings were constructed. During the Revolutionary War the place was used for the confinement of atrocious criminals, and in 1790 it was established as a state prison or jail. The entrance to the prison was down the shaft upon a ladder. On the sides and in the niches of the cavern, platforms were built of boards, for the prisoners, on which straw was placed for their beds. A writer says, "The horrid gloom of this dungeon cannot be imagined. The impenetrable vastness supporting the awful mass above, impending as if ready to fall; water trickling like tears from the sides; the unearthly echoes responding to the voice, all inspire amazement and horror. The prisoners, when summoned, came heavily ironed up out of this cavern, soldiers armed standing ready to fire, going to the sides of the forges, where collars dependent by iron chains from the roof were fastened round their necks. The prisoners were fed by tossing upon the floor among them pieces of pickled pork, to be washed and boiled in the water used for cooling iron at the forge. The punishments inflicted were severe floggings, confinement in the dungeon, bread and water diet, double or treble sets of irons, hanging up by the heels, etc." The history of the Newgate Prison is one of violence and mutinies down to the removal of the prisoners to the Weathersfield Prison in 1827.

The care of criminals in penitentiaries, beginning just prior to the year 1800, was by two very different systems. Pennsylvania and New Jersey adopted solitary confinement, which soon came to be designated and known as the Separate System; while New York and other states adopted the Silent System, at first denominated the Congregate System. The Eastern State Penitentiary at Philadelphia is to-day the type, indeed the only remaining American type, of the former; the Auburn State Prison is the original American Silent System prison, having served as model for most of the prisons since erected in this country. The Separate, or Pennsylvania System, contemplates continued

confinement, for his period of sentence, for each prisoner, in a separate cell, say eight by twelve feet, lighted from the ceiling and having each a small exercising yard, roofless, about the size of the cell. In this room or cell the prisoner eats, sleeps, lives, working as best he may at handicraft work, being allowed a small share of his meager earnings; and when, for baths or other purposes, prisoners are removed, they are supplied with hood and cloak to conceal their identity. The object of this system is to prevent the prisoner from holding intercourse with his fellow prisoners, and to compel him to hold communion with himself.

In opposition to the Pennsylvania System it is said, it is fundamentally wrong, in that solitude tends to barbarism; a man can be fitted for society only in society; that the very worst society a prisoner can have is the convict companionship of his self-communion; that the official and permitted visits to his lair are necessarily brief, infrequent, and perfunctory; that the prisoner cannot be trained to successful industry unless taught to labor in connection with other workmen upon the modern division of labor system, as in factories; that no state of increasing population and consequent increase of criminals will so increase prison accommodations as to provide what is practically a separate prison house for each prisoner—so that, as in the Eastern Penitentiary now, more than one prisoner must occupy the same room, giving convict association without supervision; and, finally, that the prevention of communication among prisoners confined under this system is impossible.

The Silent, or Auburn, System seeks to secure sufficient separation by strict rules, close supervision by day and complete separation by night; production and instruction in industry are accomplished in large shops supplied with modern means and machinery; while by the different arrangement of cells, in tiers, opening upon a corridor, and the assembly of all in a commodious chapel, the chaplain's personal Sunday communication is facilitated and the advantages of a considerable visible congregation for the public address is obtained. This system is undoubtedly more difficult to administer.

The Pennsylvania System, since its inception, has made no progress, and is only now preserved at all in public favor for the reason and to the extent that it has departed from its central principle, viz., solitary confinement or complete separation. Neither has the Auburn System made much actual progress in improvement, but now seems emerging from its familiar routine and about to test its possibilities for rational reformation of corrigible prisoners and for restraint of the remainder. Six several states, New York, Massachusetts, Pennsylvania, Ohio, Kansas, Minnesota, have in operation or inception improved new prisons upon this plan, styled reformatories.

Laws establishing the early penitentiaries, and laws abolishing the death penalty for many offenses, were coeval legislation expressive of a public sentiment repugnant to the cruelty of mediæval sanguinary penalties for crimes. The penitentiary system, however, was and is yet all too near the mediæval age to be entirely rid of the spirit, if free from the practice, of vengeful penalties. The arbitrary discrimination of the criminal law, as between felony and misdemeanor; the statutory division into degrees, of crimes such as assault, larceny, burglary, forgery, robbery, and arson, with penalties adjusted to each; and the discretion vested by law in the courts to determine, within the prescribed limitations, the duration of punishment, all unmistakably point to a purpose of retribution. It is also the common understanding of the matter that penitentiary imprisonment has a purpose to deter the class in society inclined to crimes, through

the spectacle of suffering prisoners, and that the prisoners themselves on their liberation will refrain from crimes by virtue of the remembered privations and pains of their imprisonment. These views and the expectation that wicked men imprisoned will meditate upon their past folly, will repent and resolve to do better, are all part and parcel of the philosophy that produced penitentiaries for criminals. That such a basis for the penitentiary treatment of prisoners is fallacious was early apparent from the public agitation in 1820 of the proposal to abandon the system as a failure. Other councils prevailed and efforts were soon made to improve the penitentiaries by introducing into them systematic labor, religious ministrations, and better sanitary conditions for the prisoners, until in these days it has come to pass that life in a modern penitentiary has advantages over the common life of the classes in society from which criminals chiefly come.

The retributive element in human penalties is fraught with evil among prisoners. Their estimate of the undue severity engenders bitterness and revenge, or they are encouraged in crime by undue leniency, or if, peradventure, the prisoner's perverted sense of justice should accidentally be met by his sentence and punishment, then, after having suffered suitably, he considers that his accounts are squared and every obstacle to resumption of criminal conduct freely removed. Man cannot properly retribute his fellowman; He only who sees the end from the beginning, who knows the hidden springs of human action, can rightly repay. There are no known facts of history showing actual permanent diminution of crimes through intimidation; the criminal impulse in individuals or the mass requires not a long time to adjust itself to the customary penalty; and prisoners discharged from the worst prisons are surest to commit fresh crimes. Neither is it generally true that prisoners under punishment do, unassisted, occupy themselves with moral meditation and good resolves; but, on the contrary, they oftener grieve over lost indulgences and resolve to "get even" with society or with somebody. Moreover, if retribution, deterrence, repentance, and redemption, were possible products of penitentiary punishments, there is nowadays none of it; for the punitive purpose is subverted by the improved conditions of prisoners, accorded them out of the humanity of modern Christian society. There is then a pressing need for a penitentiary system that shall more effectually protect society from crimes,—a demand the new adult reformatories are intended to meet.

These reformatory prisons are generally for the confinement of felons alone, males between the ages of sixteen and thirty years, first offenders in felony, who are by the committing court adjudged reclaimable. The laws governing commitments to these reformatories indicate a most gratifying advance of public sentiment, in that they do not contain any discoverable purpose of punishment, having regard solely to the reformation of prisoners, who are sentenced not for definite periods of time, but within the statutory term of years for the particular offense; their release, conditional or absolute, is left to the discretion of the prison managers, to be based, however, upon a reasonable probability of the prisoner's reformation. On admission to a reformatory the culprit is taught that he is esteemed by the community as unfit for liberty and must change his character, gaining confidence to secure it. He is confronted with his liability to a long term of imprisonment, on the one hand, and with the possibility of shortening it, by worthiness, even to the period of a single year; thus the love of liberty, the most powerful motive with prisoners, is at once employed for his voluntary preparation of himself for satisfactory citizenship. So strong

is this motive that almost all criminals, committed under this system, quickly respond, becoming, often unconsciously, awakened and willing subjects for the established disciplinary or training process. The demand made upon the prisoner is for self-regulated good moral conduct; pure and precise personal habits and deportment, with manliness in every relation; mental growth, to be shown in mastering school tasks previously impossible for him; and, not least, an actual performance in industry, which involves instruction, production, together with industrial inspiration. Such training is enforced or accomplished mainly by the motive named, by means of a marking system that for imperfection in any desired particular operates to retard the progress toward release. The usual effect is to place the prisoner under a tension of effort consciously for liberty, but incidentally and unavoidably for progress of improvement toward his reformation.

These state reformatory plants cost usually about a million of dollars each, that at Elmira, New York, having cost, for construction and improvements to date, quite a million and a half. The buildings are steam-heated, well ventilated, lighted with electricity; the dietary is ample and of good quality; the clothing is sufficient and not of distinctively degrading pattern; good libraries are provided, and from time to time instructive and entertaining lectures, concerts, and readings of high character are supplied.

Thus, the ordinary conditions of life in the reformatories are even superior to the prison conditions in the improved penitentiaries, yet without supplying additional inducements to crime, for the uncertainty of the period of detention and the stringent reformatory disciplinary *régime* quite counteract any attraction the privileges and opportunities might otherwise possess. The modern reformatory is a severe training school; it has been not inappropriately termed a school of adversity. The prisoner's treatment is not influenced by his repulsiveness or attractiveness, nor is much regard given to the character of his particular crime, his temporary discomfort or delight is little considered; but the cultivation of the man out of his bad character into a better state is the purpose kept constantly in view. The old tastes and habits are interrupted by compulsion at first and until new and better impressions are made; new and better activities of mind and body are required to be practiced, to the formation of good habits; the creation of new habitudes, indeed, a new character, which, with a good degree of certainty, determines the future conduct. Discipline, physical and technical training, education, religion, all skillfully and inspiringly conducted by a highly centralized governing authority are, in brief, the usual means, made more effective by the system of sentence and by the conditional release or parole of all prisoners, by which they are steadied and tested before they fully regain their liberty.

The penitentiary portion of penological science is nearing a crisis. The care of criminals requires now penitentiary treatment different from that of the modern state prison. Penitentiaries must be more serviceable to prevent crimes or they are worse than useless. Experience teaches that severity rarely deters and never reforms. What then shall be done? The answer is plain. Make the prisons really reformatory, and thus they will become preventive of crimes. For this, only simple changes are required, and there are really no serious obstacles in the way. Let us proceed as follows:

Classify the prisoners of a state or prison into two divisions, separating the good from the bad; let all be confined under the indeterminate sentence, or under such a modification of it as is now applied to prisoners in reformatories;

give increased attention to renovating the physical man for increase of his mental activity and character; supplement such training with careful education in school to the extent of each prisoner's power to receive and develop; add manual and technological instruction, until the prisoner in prison does actually earn his subsistence and becomes habituated to live by his own honest earnings; at the same time train him in practical ethics, thoroughly testing his appreciation of common morality in his daily life; teaching him also, when it is possible for him to know it, how to love and trust the Almighty Father of us all. A penitentiary system conducted for such a purpose must not be influenced by partisanship, either political or religious. The public generally must learn where true economy lies, that a considerable yet really comparatively small expenditure, to support prison reformatories that really reform, is more economical and better in every way than an apparently smaller but actually larger public expenditure for courts and machinery of the law, made necessary by the criminals remaining at large, committing depredations not only, but carrying with them, wherever they are, an influence of moral corruption that entraps our youth.

In our own country scarcely anybody is profoundly studying the science of public punishments for crime. The National Prison Association, with a membership composed mainly of practical prison men, quite unitedly favors a reformative penitentiary system, and if supported by an influential public sentiment would lead on to practical progress of prison reform. Europeans, however, are giving more attention to penology and already a new school of the criminal

law has arisen, based upon the study of the criminal, his anthropological and psychical peculiarities. One class of European writers, led by Lombroso, hold the view that crime is natural to all animate bodies and to mankind. Lombroso assumes to trace instinctive action, similar to the criminal impulse, in plants and insect life, in animals, in primeval man, and in children. He then compares by measurements the physical structure of criminals with savages, arguing that criminal conduct is a reappearance in our time of the barbarism and savagery of a primitive people, for which there is no remedy save in the gradual growth of humanity, through long ages, toward such perfection as shall produce ideal society. Other writers discover the cause of crime to be in a degeneracy of men, however derived, whether inherited from exceptional individuals or produced by the criminal's evil environment. The two classes of European writers agree in stating the immediate source of criminal conduct to be within the criminal himself, and that he may or may not be altogether morally responsible. These writers seem to agree with each other and with American penologists, that science, in a longer or shorter period of time, may greatly facilitate the recovery of criminals from their degeneracy.

The proportion of the criminals in American prisons, such as have doubtless engaged the attention of these European writers, is probably not more than ten per cent of the whole, and, it is believed, cannot anywhere exceed one third of them. The remaining two thirds may be cultivated out of their criminal character, may be rehabilitated. By this means and this alone can the startling increase of criminals be checked, and proper protection against crimes be secured.

THE COMMERCIAL RELATIONS OF AMERICAN COUNTRIES.

BY PROF. A. D. MORSE, M. A.
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Zoll Vereins,¹ or Commercial Unions—of which we hear much nowadays—are arrangements between political independent countries by which, for purposes of trade, they become one country.

Free trade between the members, a common tariff toward the rest of the world, an equitable division of the revenue from import duties, made by a board in which each country is fairly represented, and systems of internal taxation sufficiently alike so as not to interfere with the common tariff, are the prominent features of such unions. Is a *Zoll Verein*, which shall include all important American countries, practicable? Not at present. The United States, Canada, and possibly Mexico could form one profitably; but the commercial relations of South America with Europe are closer than with the United States or Canada. To ask them, so long as this situation lasts, to enter into commercial unions with us, is idle; they could not afford to do it. Nevertheless they are wise who tell us that the people of the United States ought to extend their commercial relations with other American countries. Their views are based on the following facts: first, we need foreign markets, and for a long time to come must continue to need them for our surplus agricultural produce; and we are beginning to need them, and in the future must need them increasingly for surplus manufactured goods; second, we are being excluded from important continental European markets; third, the markets of American countries are, in important respects, naturally more favorable for us than those of Europe and if once secured would be more easily retained.

Let us look at these facts a little more closely. The idea

of the sufficiency of our great home market is taking so strong a hold upon us that we are likely to forget, that great as it is, it can never release us from dependence on foreign markets. Our wealth and prosperity depend on the amount of our surplus of those products which we can produce to greatest advantage; but this surplus can be utilized only through the agency of foreign trade. We produce much more wheat, corn, meat, cotton, and petroleum than we can consume. In finding advantageous foreign markets for these products, all parts of the country and all classes are deeply concerned, for a very large proportion of the capital of the country, is, through the medium of loans and deposits in savings banks, employed in their production. A second reason for turning to foreign markets is found in the situation and prospects of our manufacturing interests. At present they are in the main limited to the home market. But their development is, and should be, more rapid than the growth of that market. The people of the United States have a genius for manufacturing. Moreover a larger market would undoubtedly create a steadier demand for these products, and steadiness of demand is, in every industry, a prime condition of prosperity. But conceding the need of foreign markets the next question is, where can they be found? Europe hitherto has been our best customer. But other countries are making headway in the production of cotton, wheat, and petroleum. Of the continental states which have bought of us most largely, France, Germany, and at last Sweden have placed burdensome restrictions upon American pork and thereby corn, which is the most important of all our food products. England, against whom

we are prone to rail, affords us our best foreign market. It is impossible to say to what extent the unfriendly movement in the continental markets will be carried; it is clear, however, that the forces behind it are far from being spent.

Summarized the situation is this: our surplus agricultural products are larger than ever before and promise to increase rapidly; the prime condition of the continued healthful growth of our manufactures is access to foreign markets; but at this very time, the markets of important states of continental Europe are being, in an increasing degree, closed to us. It behooves us, therefore, to find and develop foreign markets elsewhere, and one of the most promising in the fields, is the nearest—that among our American neighbors. To some of them we can furnish flour and petroleum, and to all of them manufactured goods, and they can furnish us certain important food products and raw materials; while this would not release us from the need of trading with Europe, it would prevent the possibility of excessive dependence. In the development of our subject, it will conduce to clearness to discuss separately the commercial relations of the United States to Canada, Mexico, the Central American states—in which because of the isthmus we include Colombia—the West Indies, and South America.

Previous to the Civil War, the United States held a large share of the South American trade. But now, judged by the imports from the different countries, we have fallen to the fourth, fifth, and in some cases to the sixth place. How did we lose the South American trade? Among the causes, I believe that the destruction of our shipping, and the enhanced cost of manufactures, owing to the tariffs of the last twenty-five years, are the most important. How can we regain this trade? First, by the restoration of our shipping through permitting our merchants to own and sail foreign built vessels under the American flag, and through proper encouragement to American ship-building, and American participation in the foreign carrying trade; second, by modifying the tariff so that our manufactures in respect to the cost of machinery, buildings, raw materials, etc., can compete on equal terms with foreign manufacturers; third, by treaties through which the obstacles to trade could be removed. Since we consume more Brazilian coffee than any other people, we have a greater interest in the abolition of the Brazilian coffee export duty, and we ought to have greater influence in efforts to that end. We ought for our own sakes, as many of us think, to abolish our import duties on sugar, wool, and tobacco, and after having done so, we could justly demand, and probably obtain, the removal or reduction of those South American imposts which affect our manufactured goods most unfavorably.

In No. 93 of the "Reports from the Consuls of the United States," there is an interesting study of the relation of the United States to the trade of South America, by Mr. J. E. Bacon, consul at Montevideo. In this, an international railway connecting our markets with Buenos Ayres and opening the central portions of South America to our trade is proposed as a method by which the United States can regain her lost commercial position. Without doubt an American international railway will be built and will be of advantage to the United States. But if the influence, direct and indirect, of our tariff upon our shipping interests, and upon the cost of manufacturing, is, as has been claimed, the real cause of the loss of the South American trade, an international railway system can do but little to bring back that trade to us. It would prove more useful to European than to American manufacturers. Even now European goods are transported in bond from New York to Mexico, over American railroads. We cannot keep certain features of our

tariff, if we would regain for our manufacturers the markets of South America. Nature has made the West Indies geographically, and therefore commercially, a part of the United States—as much as Sicily a part of Italy, or Ireland, of Great Britain. We can supply them, and they us, on better terms than other countries. Formerly the West India trade played a great part in the diplomacy as well as the commercial development of the United States. Had they advanced as rapidly as the United States, they would still hold their old prominence among our foreign markets. Their trade is still important for us. We should in every legitimate way extend our commercial relations with them, and through these our influence over them. Here as in South America, the restoration of our flag to the sea, modifications of our tariff, and treaties with reciprocity features, are the most promising means.

The interests of the United States in the states of Central America including Colombia, grow out of their relations to the proposed inter-oceanic water-ways. The control of these is as essential to the United States as the control of the Suez Canal to England. Indeed, when we think of the proportions which our interests on the Pacific have already attained, and reflect that their development has only begun, it seems hardly extravagant to compare the interest of the United States in Central American canals, with that of England in the English Channel. This interest, wholly apart from our interest in the trade of the six millions who inhabit Central America and Colombia, requires us to establish the closest commercial relations with them, and the closest alliance consistent with their political independence. Our trade with them is already considerable. Its increase would be best promoted by the means already recommended in the case of the South American states and the West Indies, and by the extension of the Mexican railway system.

Mexico is about one fourth the size of the United States, exclusive of Alaska, and has a population not quite one fifth as large. Much of her soil is comparatively sterile, her people are industrially backward, her manufactures are unimportant, her public debt is oppressively burdensome. The economic inferiority of Mexico is indicated by the fact that in 1882—which, however, was one of the most prosperous years for us—her foreign trade was only about one twenty-fourth as large as that of the United States. Mexico suffers from political as well as from economic evils. The turbulence and vicissitude which have characterized her history from the beginning, have been due in great measure to the fact that her political system, copied in its main features from that of the United States, has been better adapted to her aspirations than to her actual conditions. Even now the clergy, owing to the confiscation of the property of the church, and the wealthier classes, owing to conservatism and sympathy with the clergy, are estranged from the government. Still in spite of these and other serious disadvantages, marked progress is being made. The new railroads, which American capital and enterprise have built, are helping the country greatly. The people are patriotic. The administration is wise and firm and the conditions which favor stability are increasing.

Our fortunes are closely bound up with those of Mexico. She is our neighbor. The boundary line between the two countries, if we follow the windings of the Rio Grande is not far from two thousand miles in length. The condition, social, moral, and political, as well as economic, of our people in western Texas, southern California, Arizona, and New Mexico will always be greatly affected by the condition of the people across the border. For the prosperity of this large and important division of the United States, nothing

is more essential than the prosperity of contiguous Mexico. If smuggling, general lawlessness, poverty, and semi-barbarism prevail there, they will infect in a considerable degree the neighboring American population. Looked at merely from a commercial standpoint, the more our Mexican neighbors produce, the more they will want of our products, and the more they will be able to pay for them. The prosperity of our great western cities, Chicago, St. Louis, Kansas City, Minneapolis, and St. Paul, is due to the rapid development of tributary regions. But Mexico is, in an economic sense, naturally tributary to our southwestern distributing centers, and her development, therefore, is a matter which concerns us intimately. The reciprocity treaty which has been negotiated, ought, therefore, to have been confirmed. Indeed, it is difficult to find one valid objection to full commercial union with Mexico. Such a union, through developing her resources, would do more than anything else to increase her demand for our goods and her capacity to supply our wants.

But there is another ground which should lead us to seek closer commercial relations with Mexico. It is the view of many of our best citizens that we did Mexico a great wrong through making war upon her some forty years ago, and wresting from her on our own terms more than half her territory. To right this wrong is now impossible, to make atonement therefor is within our power, and the best way of doing this is through intimate and friendly commercial relations to do what we can to develop the natural resources of the country and the industrial capacities of the people. This of course should be associated with a just, considerate, and magnanimous treatment of their rights as an independent nation. We should seek to make her feel toward us as the Gladstonian policy taught Greece and Italy to feel toward England.

The relations of the United States to Canada differ in important respects from her relations to other American countries. The majority of the Canadians have the same language and are of the same blood. The political system is in reality, though not in form, more like our own than that of any other American country. Their productions are like those of our northern states and territories. Moreover, the several provinces are in different ways separated from one another and united closely with us. A glance at the map will show that the maritime provinces, Nova Scotia, Prince Edward Island, and New Brunswick form a group by themselves. Comparing them with the three nearest New England States, Maine, New Hampshire, and Vermont, they have an area greater by some two thousand square miles, and a population less by one third. Their natural markets are in the United States. Boston and Portland are naturally their ports as well as Halifax and St. Johns. This group is separated from the other provinces by the thinly settled and inhospitable region at the mouth of the St. Lawrence. The province of Quebec extends on both sides of the St. Lawrence from the Gulf to the Ottawa River. It has an area some twenty-three times that of Massachusetts, and a population about seven ninths as large. Extending from the Ottawa River to west of Lake Superior lies Ontario, the most populous of the provinces. In area it is about four times the size of New York, in population about three eighths as large. According to the census of 1880 the population of the entire region west of the province of Ontario, including Manitoba and British Columbia, was 171,859. It has increased rapidly since. In Manitoba it has nearly doubled. Geographically, Quebec and Ontario are contiguous, but Quebec is French and Ontario is British, and neither nationality is strong enough to assimilate the other. Vast stretches

of almost unbroken wilderness isolate the people of Manitoba from the populated sections of Ontario as well as from British Columbia. It is true that there is water communication from Lake Superior eastward, and that this is supplemented by a continental railway system. But the St. Lawrence is closed to navigation fully five months of the year, and so far as the main traffic of Canada is concerned, this expensive railway system is useful only because after being excluded from near and good markets, it gives access to those which are distant and relatively poor. Nature has made British Columbia commercially a part of our Pacific coast region. Manitoba should trade with Minneapolis, St. Paul, and Duluth; Ontario with Detroit, Chicago, and cities of the state of New York; Quebec and the maritime provinces with Portland and Boston. Naturally the great lines of Canadian traffic run south or south-eastward, instead of east or north-east. To ignore this is to fight against nature—and to be beaten. But that is precisely what the policy of both countries is compelling Canada to do. Their tariffs are contrivances by which each country either drives away its most desirable customers or makes the conditions of trading unnaturally and needlessly hard.

That the loss entailed thereby is very great is indicated by two facts: first, that Canada, in spite of tariff barriers, imports more from the United States than from Great Britain; second, that notwithstanding the cost of the Civil War the economical situation of Canada is greatly inferior to that of the United States. "The Canadians are a thoroughly industrial and frugal people; yet the difference in commercial prosperity between the continent at large and these isolated and excommunicated blocks of territory strikes every traveler on crossing the line. Our debt is rising as fast as that of the United States is falling. It is nearly three times as large as theirs per head, though we have had no great Civil War, and our necessary taxation is fifty per cent higher than theirs. The value of farms in Canada is everywhere going down."²

For this situation the only adequate remedy is commercial union. There is no greater error than that which assumes that the situation of our neighbors is a matter of indifference to ourselves. We cannot help sharing in their prosperity and their misfortunes. We are poorer because Canada is poor; with the increase of Canadian wealth we shall grow richer.

Commercial union would give on the best terms the great and growing trade of Canada to our merchants and manufacturers, our railroads and canals, our seaports and interior commercial centers, and, what is not less important, cheaper food and lumber to our people. Moreover, the removal of the tax on Canadian timber and lumber would check appreciably the too rapid destruction of our own forests. The fisheries' question would be settled. There would be no occasion for the petty and belittling quarrels in which we and our northern kinsmen too frequently engage. A reciprocity treaty would be better than the present arrangement; but our experience has shown that such a treaty does not exclude jealousies, and may be temporary. Full commercial union once established could not be easily overthrown and would afford little chance for bickerings. Commercial union would stimulate, it is true, the development of Canada more than that of the United States; but her gains would be ours as ours would be hers.

The fact is, that nature and history have made the Canadians and ourselves economically one people; and the loss which the denial of this fact entails, Canada is less able to bear than we. Our developed and available resources are continental, hers are those of a narrow, very irregular, and

vastly extended borderland. One way by which the injurious tendencies of the existing situation can be made clear, is to suppose a line drawn from Portland, Maine, to some point on Puget's Sound so as to cut off a narrow strip of territory with a population equal to that of the Dominion, say about five millions. Such a line would pass through southern New Hampshire and Vermont, central New York, and from there quite close to the boundary line between the United States and Canada, until it reached its western terminus. Would it be profitable for the inhabitants of this narrow immensely extended belt or for the people of the main division of the United States to have custom-house barriers set up between them? It is evident that such a step would impoverish the smaller section and seriously lessen the wealth of the larger. The people on either side of the line would find themselves excluded from the best markets. Rochester and Buffalo would have to deal with Portland instead of New York and the natural lines of traffic would generally have to be disregarded. The northern section in order to secure industrial independence would

need to diversify its industry and build up a home market by means of heavy protective duties; and these would divert labor and capital to relatively unprofitable employments. In no way, in an economic sense, could either section be benefited; and in several ways each would suffer heavy loss. But in what essential respect does the supposed case differ from that of the United States and Canada? In one respect it would be more favorable, for it is considerably shorter from Eastport to Puget's Sound than from Cape Breton to Vancouver's Island. If our Revolutionary ancestors had succeeded in their efforts to induce Canada to make common cause with the thirteen colonies, or if the hopes of annexing Canada by conquest, entertained by many Americans in 1812, had been realized, we would now be approving free trade between the provinces and the United States, as we do approve it between New York and New England.

But the political services of commercial union would perhaps outweigh its economic benefits—it would at least lead both peoples to consider without prejudice the great issue of political union.

End of Required Reading for March.

TO WORDSWORTH.

BY O. F. EMERSON.

Poet of Nature, thou didst teach to see
In earth and sky, meadow and river's glide,
On mountain peaks, in ocean's ceaseless tide,
Order and truth,—a peace and unity,
In seeming discord and complexity,
Of Nature's handiwork; didst teach to know,
That in all life, even in the flowers that blow,
There may be seen the shadows of infinity.

Priest of the Beautiful! Thou in thy life
Of noble thought, of simple wants and cares,
Of fightings stern in which our days are rife,
Didst weave a beauty that the hero wears,
As on he leads to triumph in the strife,
Or bravely in life's common way he fares.

EMBEZZLERS AND DEFAULTERS.

BY JOHN HABBERTON.

Old industries often reappear under new names. In every generation and every country stealing has been a prominent though reprehensible method of getting money and property. It is as common now as ever, but its larger developments are partially secreted under new verbal expressions. The man who takes a dollar or a loaf of bread which is not his own, is still a thief; he who deliberately takes a few hundred dollars out of a merchant's cash-drawer or a few thousand from a bank safe is a burglar; but the trusted clerk or other official or agent who disappears with half a million in cash is an embezzler or defaulter.

The titles have not exactly the same meaning, according to the dictionary. To embezzle means to filch; to default means to fail or be lacking in something; but the practical result of both operations is the same as that of common stealing—it is the forcible appropriation of the property of another, no equivalent being left in its place.

A lawyer to whom the author once said this, replied, "You are not exactly fair. Some embezzlements and de-

falcations are the results of deliberation, but the greater number are not." This is true, but "pity 'tis, 'tis true." The embezzler or defaulter must have considerable business ability or he could not be in a position where there is a great deal of money to handle. Frequently he is a fine fellow in other ways; he is sympathetic, generous, and hearty; he is full of laudable tastes and aspirations, and almost always he is a man of strong affections. The warden of a large state prison said, a few years ago, that the embezzlers and defaulters behind his bars were distinguished from all his other prisoners by the intensity of their affection for their wives and families. There is no other class of wrongdoers for whom a petition for pardon can be sure of so many strong signatures. By nature the embezzler or defaulter is generally a man whom everybody likes, and people who are largely liked must possess many good qualities.

How, then, can they descend to sins of great enormity? Easily enough; it is by the perversion of some of their good qualities—perhaps of only one. The old-fashioned idea that

to commit a great sin a man must be generally depraved, is going out of fashion; would that it would disappear entirely! A single weakness of character, with frequent opportunity to gratify it, can make a scoundrel of any man who possesses all virtues—but one.

Opportunity, or the people who are responsible for it, makes scores of thieves of men who never meant to be dishonest. One form of government to which all nations have submitted from time to time is called a dictatorship, but one result of it usually is the final killing or banishment of the dictator. Unlimited power is dangerous in politics and government, but thousands of the prominent, public-spirited citizens who inveigh against it during political campaigns, are directors of banks or other large business concerns in which the cash-box contents are absolutely at the mercy of a single individual. Directors are supposed to direct; sometimes they do it, but many of them find it cheaper to keep a detective or two in their employ to watch the cashier and report upon his habits; while still others find it cheaper to take no precautions whatever. Suggestions of methods of making directors live up to their responsibilities, are about as numerous as banks, but none of them answer the purpose; even the Chinese way, which is to lop off the heads of directors and place them among the assets of a robbed bank, does not always succeed, otherwise no Chinese directors would have been beheaded.

But opportunity requires the man, and in this respect the managers of large firms and financial institutions again have a great deal to answer for. The custodians of large quantities of ready money are oftener selected for their business ability than with any thought as to their honesty; oftener still they reach their high positions because they are good fellows—because everybody, in the concern and out of it, likes them. Complaisance, free-handedness, hearty liking for everything pleasing, and reluctance to say "No," will make a good fellow out of a man who has little or no moral character; so will a general willingness to oblige the person nearest at hand, regardless of rules, laws, or the rights of others. Yet the good fellow often is trusted when better men are suspected.

As already stated, however, a man need not be destitute of moral character in order to become an embezzler or defaulter; he needs only a single weakness that may be gratified by free use of money. Good horses, a yacht, a handsome country place, a patent to push, better clothes for wife or children—even the desire for a better pew in church, or to contribute handsomely to the missionary cause, may incite a man to begin to borrow from his employer's cash-drawer without asking permission.

"Borrow?" Yes, that is the word the defaulter almost always uses when he begins his irregular operations. The custom is as common, almost, as lying; the deficit of cash can easily be balanced on the accounts for a day or two by a memorandum or due-bill; many business firms make no objection to this custom, until it brings some one to trouble.

Borrowing is a dangerously seductive practice, even when the lender is willing; it is far worse when the borrower has no one but himself to consult. The man of many necessities, interests, and tastes who will not, if he can, borrow his income in advance and spend it, is hard to find. Such a man may become frightened, "pull himself together," and reform, but unless he has strong moral principle what is to frighten him so long as he himself handles the cash? A great hubbub was once caused in banking circles in New York by the discovery that a bag supposed to contain eight thousand dollars in gold was full of old-fashioned copper cents. It had stamped upon it the value and the

name of the bank which originally issued it, and the bag, at least, had passed through several different hands unopened.

One bank defaulter, for an amount which exceeded his annual salary, avoided detection for months by the very simple operation of taking a note or two from each package of fifty or a hundred. A tiny, private mark identified the "light" packages, which he never issued without making up the deficiency, in them, from his loose notes; but as his superiors never counted the notes themselves, but only the sums marked on the "straps," he might have gone undiscovered until death, had not an accident kept him at home several days and a substitute discovered the trick.

Once let a man learn by experience that he can exact forced loans without being discovered, at least for a time, and a glorious business vista fills his eyes. "Every man wants a thousand pounds," says Thackeray. Is there at any business center, no matter how small, one cashier, paying teller, clerk, or even office boy, who is not sure he knows of some operation by which he could make a lot of money if he could only have the use of capital for a little while? Is there a man in New York who handles a great deal of money—no matter if it belongs to other people, who is not certain that he can get a "straight tip" on stocks, or petroleum, or wheat? If he is sure of success, what harm will it do for him to use money which he can speedily replace? What, in the abstract, is the money-lending portion of the banking business but making loans on the assurance that the money will be returned? Customers are often allowed to overdraw their accounts, on the supposition that they are honest and will quickly make good the deficiency; business credits are given on the same principle; well, the clerk knows he is honest, and is sure that he will return all he borrows; indeed, he must. Ah, there is no logic so convincing as that of the man who has only himself as judge.

The defaulter or embezzler always comes to grief; so, at least, he and the police say. A single influence which he seldom takes into consideration is likely to betray him at an unexpected moment. It is said and believed that some banks keep a special detective on watch over each of their men who handles money. Any indication of lavish personal expense is reported. So is any visit to race-course, pool-room, gambling house, or other resort where money must be risked. Just as important, to the banks, is the knowledge that an employer associates with speculators of any kind. Suspicion does not always result in quick detection, so a watched man may make way with a great deal of money before running away or being arrested, but the end, when it comes, comes quickly. Some banks and merchants pay to have their clerk's honesty guaranteed to a certain amount; the guaranteeing party then establishes the watch, and maintains it closely.

Quite as often, the guilty man is his own betrayer. No amount of nerve or any other quality but utter callousness can prevent the face telling tales about the heart and head. There are men who read the human face as if it were a book, and the embezzler knows it, so only a sharp look, perhaps with no detective purpose, is enough to disturb his peace of mind. The principal in an immense defalcation which occurred a few years ago, was the cashier of a bank of which he previously had been paying teller, and so entire was the confidence of the directors that this cashier was absolute manager of the bank. Yet during all those years several men who knew the fellow only by sight and title used to express wonder, to one another, that detection was delayed so long. That the man was carrying a criminal secret was as evident to all of them as that he had two eyes, yet these observers were not detectives, nor customers of the bank which the

wretched man was robbing—they were quiet business men who were accustomed to judge people by their faces.

Some embezzlers and defaulters are probably consoling themselves with the thought that while many men are stealing, only a few are being caught at it. According to the police, however, more of such rogues are found out than the public ever hears of. So long as there is a hope of regaining any of the stolen money, employers are more inclined to compromise than prosecute; it may be a crime, specified as "compounding felony," but a large sum of money, rightly his own, will outweigh the legal scruples of the average business man. Many small embezzlers are forgiven and restored to confidence by indulgent or great-hearted employers who wish to save them and their families from disgrace, and who believe fright and remorse will prevent repetition of the crime; others, nominally forgiven, are made slaves for life through written confessions which they are compelled to make. The number of such cases is known to be large.

But, perhaps, the guilty man is forewarned or frightened and escapes, possibly with some of his plunder. Even when family, friends, and reputation are lost, liberty is sweet—to some natures. Where is he to go? Canada may suggest itself to his mind, but a man's feelings as well as his sense of honesty must have become hardened before he can be willing to be known by name and reputation in any part of Canada which is desirable as a place of residence. Europe? No; extradition treaties abound, and some thieves have been surrendered by foreign governments merely through courtesy. South America? Except for a few large cities it is a wilderness, and in the cities it is not impossible to have him kidnapped and brought back, if business or vengeance requires it. Go out West? Everywhere in the new West there are men from all parts of the East, and an offer of reward generally secures the return of a fugitive. By disguise a man sometimes succeeds in eluding his pursuers, but he is not so successful with his fears. In several localities in the West the writer has had different men pointed out to him with the question, "I wonder what he left home for?" The men in question, with one exception, were leading exemplary lives, but their faces betrayed a past in which there was something guilty and disquieting. One of these men was afterward found acting as chief magistrate of a Western town and as superintendent of a Sunday-school. He was respected by every one, and his older acquaintances had no doubt of his repentance and reformation; unfortunately for him, however, there was no doubt as to his guilt, and he was obliged to go to prison on a long sentence.

The escaping embezzler or defaulter seldom carries much money with him; as a rule, he runs away because he has wasted all the money he has taken, and cannot take any more without being detected; neither dare he remain to face the inevitable. Lucky is he if he has money enough to reach some place where he can hide his identity, or perhaps die in solitude, by his own hand, rather than live in disgrace before all his friends and acquaintances.

Occasionally the embezzler is punished by law, instead of only by his conscience. The sentence, whatever it may be, seems ridiculously inadequate, for if the common thief goes to prison for seven years for stealing a watch or a horse, why should the man who steals half a million dollars get off with a similar sentence? On the other hand, if the term of imprisonment is to be determined by the value of the property taken, half a dozen successive life-times could not pay the penalty, to say nothing of the punishment due for be-

trayal of trust. The most that can be said in explanation is that the purposes of punishment are assumed to be the reformation of the criminal and the setting of a warning and example. Whether the defaulter, when discharged from prison, is reformed can scarcely be ascertained, for he is not likely to reach again a position in which his old weakness might find opportunity. The effect of his punishment as a warning to others is not distinctly visible, and some business men wonder whether there is any such effect, for defalcations and embezzlements do not decrease in number.

The effects upon the community of any embezzlement or defalcation are many times worse than the amount of money taken can measure. A prominent banker is reported to have said that the banks could far better afford to give a scamp as much money as he could steal, were such a method possible, than to have a defalcation made public, for the entire banking interest suffers, for days or weeks, through the impaired confidence that follows the announcement that a trusted employee has disappeared after making way with large sums.

An embezzlement in a business firm has a similar effect; it not only lessens confidence in the stability of the losers, but makes all creditors more timorous and urgent. If the embezzler gets away, the moral effect upon many of his old associates is very bad; fellows who mean to be honest are often weak enough to feel that the honest man must be a drudge all his life while the embezzler has a good time, for is not "a good time" what every one wants a lot of money for? The larger class, which is honest only through fear, think somewhat admiringly of the successful runaway; they know nothing of his mental torments; they know only that he got the money, and they begin to wonder whether they might not make an operation equally successful.

Society at large suffers still worse by any exposure of an embezzlement or default, and repeats Washington's historic remark about Benedict Arnold, "Whom now can we trust?" The true and only basis of business and society is confidence; all other qualities are useless if this is lacking. The finer the social character and qualities of the offender, the greater and more widely spread is the doubt of human nature that his offense causes. The church, and religious influence in general, suffer worst of all. The infidel who betrays a trust is as much a hypocrite as if he were a church pillar, but infidelity does not aim to make men better, while religion does. The weak and willful, who above all others need the restraining and ennobling influences of religion, gladly make an excuse for delay and doubt, out of the fall of some church member who has been in a position of trust; they blame not the man, but his beliefs, forgetting that belief in itself can do nothing unless the man lives up to it.

The effect upon the family and friends of the embezzler need not be dwelt upon; every one who has seen such families and friends has seen parents going sadly and prematurely to their graves, or wives going to the lunatic asylum, or sons and daughters going to the devil, or growing up, no matter under how tender and sympathetic care, to be pointed at and perhaps twitted on account of their father's crime. Few men have defaulted without injuring their nearest friends, directly or by implication, in a business way; no defaulter escapes without leaving upon the heart of each friend a load which grows heavier with the years. Perhaps it is as well that the law does not attempt to punish the embezzler or defaulter according to the full significance of his crime, for even the terrible Chinese torture known as "The Hundred Deaths" would not suffice.

THE RUSSIAN EMPIRE AND ITS CAPITAL.

BY BISHOP W. F. MALLALIEU, LL.D.

The Russian Empire as it exists to-day is one of the greatest nations the world has ever known. It has a population which amounts to nearly, if not quite, a hundred millions. Its territory extends from the shores of the Baltic across two continents to the waters of the Pacific Ocean. It reaches from the icy regions of the polar circle to the Persian Gulf. It crowds the Chinese along the entire frontier of Siberia. It crowds the domain of England in Central Asia. It has been moving on toward Constantinople for the last hundred years with the steady pressure of an avalanche and the resistlessness of fate.

It is a remarkable fact that the foundations of this immense power were laid a thousand years ago by an adventurous Northman. While other Northmen were invading France, and making inroads all along the coast from the mouth of the Elbe to that of the Ebro, and while others were establishing themselves at various points about the Mediterranean Sea, a certain Rurik, with two of his brothers, and a following of daring warriors were accomplishing the invasion and subjugation of the people living in what is now the western part of Russia. For at least seven hundred years the throne of Russia was filled by the descendants of this adventurer, the last one, Theodore I., having died in 1598.

Modern Russia dates no further back than the time of Peter the Great, who died on the 8th of February, 1725. He was the fifth of the Romanoff family, and the ancestor of the present Emperor. The Romanoffs have filled the throne since 1613. Peter found a nation of barbarians. He was in many respects a barbarian himself, and yet he had the sense to see that something else was necessary besides coarse, brutal force to constitute a nation. His people were rude, uncultivated, and far behind the other nations of Europe. He set about the gigantic task of civilizing and elevating his people. To this end he visited Holland and England and made himself familiar with various kinds of handicraft. He appears to have done this partly for the example, and partly that he might have personal and practical knowledge of the arts which evidently were essential to the best life of a nation. He wrought at ship-building and we are shown at the present day in St. Petersburg a boat which he built with his own hands. It is a rough and simple specimen of a dory, and yet as good a boat as ever was built by royal hands. He wrought at blacksmithing, and so we are shown in the grand museum at St. Petersburg a bar of iron that was fashioned by his sturdy strength. He wrought at the turning-lathe, and specimens of his skill are abundant. He carved in wood and ivory, and he embossed brass, and so he went through the whole round of trades. He was proficient in none, but could do something in them all. But he was greatest in state-craft, and was a most courageous fighter, and, so, by dint of work and war, he made himself a power in his dominions, and consolidated and harmonized the discordant elements of which the nation was composed.

The arrangement of society and of civil and military rank was to a large extent the work of the active mind of Peter. He found the government an absolute monarchy, such he left it, and such it continues to this day. In theory, and to a large degree, in fact, the will of the czar is law. Of course he has his advisers, and men of ability are employed in the direction of affairs, but they all count for nothing if the man

on the throne has a will, and knows what he wants. It is something almost appalling to think that one person so completely holds in his hands the destiny of a hundred millions of his fellow-beings. Kings may talk of ruling by the grace of God, and of their divine right so to do, but no sensible man and certainly no American has any sympathy for any such antiquated notions. There are many grades of official life in the civil service of the country. In the military the ranks of officers run from count to field-marshal; in the navy from midshipman to general-admiral. In the church there are nine orders, or if any one objects to the idea of so many orders, there are nine officers, including the metropolitan, the archbishop, the bishop, and so on down to the deacon. The emperor is at the head of the church and ranks all the officials of whatever grade.

But it will be recognized that one of the greatest works of Peter was the founding of St. Petersburg, which is the present capital of the nation. It seems strange at first thought that a city should be built so far to the north, in fact at the extreme north-western corner of the empire. But it must be remembered that when it was founded, the Russian Empire did not have its present vast dimensions. Besides, Peter had taken the idea that the great and progressive nations of his time, and the times immediately preceding, had depended very largely upon their commerce and naval power. The Baltic Sea was the only point in the empire that gave him the opportunity to establish a navy, and so have access to the commerce of the world. Hence, though the country around the site of the city, and in fact, the site itself is utterly flat, and to a large extent swampy, and though the location is 60° north latitude, it was deliberately fixed upon as the best place to establish a city to carry out the plans in the mind of its founder. To-day there are probably not less than a million people in St. Petersburg, with a considerable population closely adjacent. Indeed at the present time, it is one of the largest, richest, and most beautiful cities in all Europe. There are as few signs of poverty and wretchedness here as in Berlin or Paris, and certainly fewer than in London. There may be drunkenness, but the police regulations are so strict that a drunken person is seldom seen upon the streets. By whatever means the end is reached, it must be conceded that the city is thoroughly governed and quiet reigns.

In approaching St. Petersburg by water, we are impressed with the vastness of the naval power of Russia. Cronstadt, which is about twenty miles below the city, is the naval depot. An exceedingly strong fortress on either side defends the approach to the docks and ship-yards where we can easily see a whole fleet of iron clads of various sizes and styles. Many of them are very formidable looking vessels, and doubtless in conflict they would prove themselves capable of inflicting any amount of destruction upon an enemy. They are quiet enough now, but they only wait the will or whim of the czar to put forth all the infernal energy which they possess. Such navies with such armies as Russia constantly maintains must of necessity impoverish the nation, and so we find that the money of Russia, and the credit of the country are about the most valueless of any in Europe. Gold and silver are as scarce as in the United States during the Civil War. The bank notes are much depreciated in value, and the small

coin in circulation is the basest looking stuff that ever was honored with the name of money. But at the same time the despotic power requires that all taxes and duties of whatever kind whenever paid in government notes, shall be paid on a gold basis; so that if a paper ruble is only worth half its value in gold, it will take two of them to pay a single ruble's worth of taxes or duties.

The churches and palaces and museums in St. Petersburg are equal if not superior in many respects to those of any European city. The picture gallery has some of the greatest productions of some of the greatest masters of ancient and modern times. The whole empire has been searched from one end to the other to supply material for the museum. Such displays of ancient armor and weapons of endless variety, such accumulations of gold and silver and precious stones, such collections of the rarest and most curious and most beautiful ornaments can be found nowhere else in the wide world. There is certainly nothing in London or Paris or Berlin to compare with them.

The Winter Palace certainly surpasses any other in Europe. It is upon the bank of the river Neva. It owes its existence to the Empress Catherine II., that most extraordinary woman of the last century, extraordinary in ability and vice, the surprise of all her contemporaries and the wonder of all who have ever studied her character. The building is four stories high, and is 450 feet in length by 380 in depth. It is of a light brown color, and is highly ornamental in its style, with some approach to the Corinthian in several particulars. It is exceedingly difficult to gain admittance, and it was only by the most diligent endeavors, and a special note from the American minister to the commanding officer that we were at last successful. It is a wilderness of halls and stairways and apartments. There are many pictures on the walls, most of them battle scenes or portraits. The Nicholas Hall, and the St. George's Hall, will never be forgotten by any one who has visited them.

One of the most interesting rooms is that where the Emperor Nicholas the First died. It is in the upper story, in the far-away north-east corner of the building. It is approached through three or four doors, and at last a narrow passage-way leads to the door of the room. When we enter we see a room not more than 18 feet long and 12 feet wide, with only two small windows. The room is an attic, and is low in the walls, and the smallest and poorest we have seen in all the palace. It looks at first glance like a sort of editorial or literary den that some one had selected for the purposes of privacy and quiet. It is the room in which the Emperor spent most of his time when not officially employed. It is the room in which he died, some say by poison administered by himself in a fit of melancholy induced by the outcome of the Crimean War. At all events the room remains just as he left it. Near the center of the room is the plain iron bedstead, with the plainest furnishings. There are a half dozen chairs, a small writing table, a sword or two, and two muskets with bayonets attached. There are a few small cheap pictures about the room, and at the head of the bed a picture of a favorite daughter dressed in the uniform of a cavalry officer. Near the bed is a box, or what might have been a foot-rest, upon which are a pair of slippers. The Emperor must have had them when a young man, and they look as though he had used them all through the Crimean War, and ever after, till the time of his death. A more dilapidated down-at-the-heel and used-up pair of slippers could not be produced, but at the same time they have a look of exceeding comfort, and there can be no doubt that even the Emperor felt better when he took off his heavy top-

boots and sat down in his slippers, in his own snug little room in the attic of his great palace.

The Russians are a church-going people and they have many large and expensive churches in St. Petersburg. The Kazan cathedral is one of the most interesting. It is located on an elegant and popular street of the city. It has a colonnade in imitation of St. Peter's at Rome. There are one hundred thirty-six immense granite columns, each one a single stone. The interior is as peculiar as the exterior. The body of the building is in the shape of a cross 238 ft. x 180. At the center is a cupola, the top of which is nearly 250 feet high. The cupola is supported on four columns. From these four central columns there diverge four rows of black, highly polished, Finland granite columns. There are 56 of them in all. They are monoliths 35 feet high and nearly, if not quite, 6 feet in diameter. They rest upon bronze bases, and are finished at the top with Corinthian capitals also of bronze. The church cost more than \$3,000,000, and more than half a ton of solid silver is used in the ornamentation. The service we attended was on a Saturday evening, and a more earnest and hopelessly superstitious company of people were probably never assembled at the shrine of any heathen god.

The grandest church of all is that known as the cathedral of St. Isaac. The saint for whom it was named was not the ancient patriarch—but a certain Dalmatian. Peter the Great built a church of wood on the present site. That was torn down, and the religious, but very impious, Catherine the Second commenced another which was not completed till 1801. This second church was pulled down to make room for the present edifice. It cost more than a million dollars to prepare the foundations. It is estimated that the entire cost of the building is not far from \$20,000,000. The church is in the form of a Greek cross and is 364 ft. x 315. The first impression that one gets of the building is that it is barbaric in its style. The cupola is the grand feature of the whole. It is 66 feet in diameter and 296 feet high. Its dome on the outside is yellow with gold leaf—its inside is richly frescoed. Within the circle of the building there are 112 granite pillars, with bases and Corinthian capitals of bronze. The pillars are 60 feet high, 7 feet in diameter, and weigh 128 tons each. They are monoliths and were quarried in Finland, and they are polished with the utmost skill. But it is utterly beyond present possibilities to describe the magnificent and ponderous royal bronze doors, the columns of lapis lazuli and malachite, the glories of the inner sanctuary (where no woman is admitted), and many other things that delight and astonish the eye of the beholder.

It is worth the while of all Protestants to remember that besides the many Sunday services, daily services are held in this cathedral from 6 to 8 a. m., from 10 to 12 a. m., from 4 to 6 p. m., with an extra evening service on Saturday. Whatever value may be in the endless mummeries that take place, it must be confessed that the singing is something that can never be forgotten. The singers are males, and their voices range from the most delicate treble to the profoundest bass. The music must be expensive, and undoubtedly attracts many who would not otherwise attend. But are souls fed, are men and women saved from their sins, are they made better, are they led into the paths of holiness? These are questions of most solemn import, and so far as can be learned the whole round of worship is a formality without spiritual life or power. The missionary work of evangelical Christianity will not be fully accomplished when all the heathen world is enlightened; the Russian Empire will still offer a field for the most earnest effort and the most unfaltering truth and the most dauntless courage.

HENRY CLAY.

BY COLEMAN E. BISHOP.

The Triumvirs of the Union: ALEXANDER HAMILTON, the Founder; HENRY CLAY, the Pacifist; ABRAHAM LINCOLN, the Defender.

Their work for the Union was continuous and that of each was representative of his epoch; insomuch that the story of these three lives is a thread on which might be strung the history of the Union, from Concord to Appomattox.

Henry Clay's birth was in the midst of the travail of the Revolution; he was born in Virginia in 1777. His father was a preacher, his mother a patriot; the one was his progenitor, the other gave him his conspicuous characteristics. *A priori*, we may so account for the character of any great man; for it is from the mother that come the decisive influences of great character, whether they be hereditary, pre-natal, or educational. Generally, it is only exceptional rapport between parents that gives the father much contributory influence on the character of his children. Nature keeps the equilibrium between the sexes in the influence of each on their progeny. Hence, the progress of the race has ever been measured by the status and regard of women.

But there is a story told of Clay's mother which furnishes us specific evidence of the source of his master passion, patriotism. When Henry was four years old his father died. The ruthless Colonel Tarleton was then devastating Virginia, and he raided the Clay plantation while the father's remains were lying in the house. Tarleton left on the table a handful of British gold to compensate for the spoliation of his troopers. Up rose the widow in her weeds, snatched the coined images of her country's oppressor and hurled them into the fire.

For other education than was furnished by object lessons in improvident, impulsive, passionate patriotism such as this, the boy was mainly indebted to the indifferent country school of the neighborhood and to a few years of life in that nursery of republican statesmen and orators, Richmond. Here he read law and imbibed politics under the tutelage of Chancellor Wythe, one of Virginia's greatest jurists, and a signer of the Declaration of Independence. At the age of twenty, Clay was admitted to the bar and then he followed his mother and family to the new world. From Kentucky, Clay dates his half century's marvelous career.

And it was marvelous; to many in this day his power remains a puzzle. To understand him we must know the time, the men, and the cause for which he stood. He was the first of our great popular leaders who could at will move men as if they were automatons; and no American leader has since held such an empire over men's hearts and suffrages. His eloquence was, indeed, irresistible; but those who never saw him were among his most ardent and persistent followers. Abraham Lincoln, for instance, was through all his early manhood a devotee at that unseen shrine; but when he at last visited Clay at Ashland he was disappointed in the personality of the man whom he had long idolized from afar. The Whig party went to defeat after defeat joyously under Clay's lead. The ecstatic triumph of Harrison's election was clouded with grief for thousands of Whigs because it was not Clay, instead, who was to receive the guerdon of long-deferred victory. Men and women everywhere who had never seen Clay, wept as with a sense of personal bereavement over his defeats. I have heard old

men with tremulous voices say, reverently, "Henry Clay was the only true religion that ever was in American politics." Mrs. Todd, step-mother of Mrs. Abraham Lincoln, saw the reception of the news of Clay's defeat in '44. It was at the wedding feast of his niece. The eye-witness says:

"As Mr. Clay read the returns from New York which announced that he had lost the prize of a life-time's ambition, a blue shadow, as clear and distinct as the shadows on the grass in the yard there, began at the roots of his hair and moved slowly down over his face, passing off over his chin and disappearing. Then he turned quickly to the table at his side, took up a glass of wine, and said with his inexpressibly sweet and winning smile, 'My friends, let us all drink to the health and happiness of the bride and groom,' and set the example. It was followed by some of the company, but most of us were too heavy-hearted for such a show of festivity, and in spite of all the efforts to restore gaiety the gloom deepened, and in half an hour the last guest had departed. I saw that night not only women, but men, strong men, sir, cry like children over the defeat of Henry Clay. I have never seen tears shed at the defeat of any presidential candidate since, and if you want my opinion, I don't think any candidate since Clay's day has been worth crying about."

Clay himself understood it and expressed it in a word in the famous scene when he went to the bank to beg further postponement of the ruin long impending over his home from twenty-five thousand dollars indebtedness and was informed that he did not owe a cent; unknown friends had taken up the last of his notes. When he was made to understand the situation he cried, "Had ever any man such friends—and such enemies—as I have?" None ever had in this country.

Such worship is not given to personal qualities alone, however heroic, lovable, and magnetic; nor to such charms even when devoted to the loftiest aims—and Clay's aims were often far from unselfish, particularly after he had "gotten the presidential maggot into his brain." No, to become such a demi-god as Clay became, a man must reflect and embody some great common passion of his followers. A popular idol is a popular mirror; it is themselves that people really adore in their leaders. Hero-worship, in the last analysis, is the unconscious apotheosis of egoism. To understand Clay's power, therefore, we must learn the grand aspiration of his supporters; must understand the crisis and the cause for which he stood. Of Clay it is more true than of any other public man, save Jackson, that we can "read his history in a nation's eyes."

Henry Clay was the embodiment of this nation's first true patriotism. Distinctive Americanism was born west of the Blue Ridge. It was fifty years after our national independence had been acknowledged by other nations, before we acknowledged it ourselves. So long as the United States consisted of a narrow fringe of settlements, hemmed in between the Atlantic and the Appalachians, we remained of necessity a maritime people, and as such, dependencies of foreign countries. It was long held unsafe to trust our shaky experiment in government to any but "trained statesmen," and our statesmen had all been trained in European

schools. There were two great political parties called, respectively, "the English party," and "the French party." No American party had yet been thought of. There was no true democratic spirit, little confidence in the people on the part of leading men. Suffrage was restricted by property qualifications; presidents were nominated and practically elected by a close junto of congressmen until Jackson's time. For the first forty years only two states—Virginia and Massachusetts—were "cultured" enough to raise presidents of the United States.

Even before Clay came on the active stage, the best elements of American manhood had begun to bolt from the stifled life and dry-rot politics of the East; and Americans finally took America in 1828. The Louisiana annexation and the organization of the Northwest Territory opened up the "whole boundless continent" and invited to free homes, equal chances, elbow-room, unconventional, adventurous, American life. Twenty-five thousand in a single year accepted the invitation and settled in the valley of the Ohio. With that great exodus began our change from maritime to inland interests, which has continued to the present time; then began the transformation from colonial to national character; then began the peaceful revolution which added the enacting clause to the Declaration of Independence.

Under the inspiration of that sublime work of creating a mighty empire from nothing, rose a new order of men such as the world had not before seen—original, daring, creative, prophetic in hope and faith; American, in a word. Under the prophetic conception of a nation conquering and covering the continent, they soon grew to be intensely charged with national spirit. Absorption in their grand conceptions and the working them out isolated them from the rest of the world. Thus again by a forty years in the wilderness was raised up "a peculiar people" for a great mission.

With this peculiar people and into their inspiring work Henry Clay threw himself with all the energy of a rare enthusiasm, all the abandon of a reckless courage, and the ardor of an inherited patriotism quickened by the new environments. Soon he became the chief spokesman of the New Americanism; then the recognized leader of the Young America. Kentucky sent him as the representative of the new régime to the Senate of the United States in 1806, and for the following half century he continued to bear before the world the banner of Americanism. This is the cause which in his person was so ardently worshiped. "Gallant Harry of the West" was the synonym for the daring, the fraternity, the democratic spirit, the patriotism, and the continental aspirations of the New Americanism. Rufus Choate said of Clay's principles, "They rise like the peaks of a lofty mountain range from the table-land of all illustrious life." Mr. Schurz adds, "Here was the mainspring from which Henry Clay drew his political aspiration. This enthusiastic conception of national grandeur, this lofty Unionism, constantly appearing as the inspiration of his public life, gave to his policies, as they stood forth in the glow of his eloquence, a peculiarly potent charm."

The War of 1812 was the great opportunity of Clay and the New Americanism. More than any other man, he forced that fight, kept alive the war spirit, "fired the nation's heart"; and as one of the commissioners who negotiated the treaty of Ghent, he secured to the country all of the substantial results that were gained by the war. For twenty years our government and commercial classes had remained stolid and pusillanimous under foreign depredations, impositions of our seamen, insults to the flag, and Indian hostilities. At the last, it was the West and South that forced the East to defend its commerce and sailors and protect our flag. Clay

effected a combination of votes sufficient to defeat the re-election of Madison, and armed with this club he wrung from the timid president the war message which brought hostilities. But a paralytic and blundering administration and anti-war New England made the war a succession of disasters and shame to the nation; our armies did not win one signal success; and if "Old Hickory" and Young America had not continued the vigorous prosecution of the war after it had legally closed, had not given us the *post-bellum* victory of New Orleans, we should have lost the only moral effect of the contest and left the world to conclude that Americans lacked the courage to fight as well as the patriotism to resent insult and injury. And finally, it was due to Clay's obstinacy and prescience that our commissioners did not concede to England the right to a joint control of the Mississippi River to its source. Soon after the treaty was signed, while Clay, disgusted and dissatisfied with the result, was lingering yet in Paris, the news of the battle of New Orleans reached him. "Now," cried the patriot, "now I can visit England without mortification!"

The application of Missouri to come into the Union with slavery, brought the country face to face with threats of dissolution of the Union, and called Clay to the rescue. The results of his labors and skill in composing the contention were the adoption of the Missouri Compromise of 1820, and the conferring on him of the title of "The Great Pacificator." During the two years in which the nation was uptossed by this agitation, Clay did not cease to exert all his great influence throughout the country, to wield the power of his position as Speaker of the House of Representatives, sometimes in rather an arbitrary manner, to exhaust all the resources of parliamentary tactics, to circumvent the hot-heads and avert the chief catastrophe; he made speeches innumerable; he "went from man to man, expostulating, beseeching, persuading in his winning way. Even his opponents in debate acknowledged, involuntarily sometimes, the impressive sincerity of his anxious entreaties." John Quincy Adams wrote in his famous diary that one of "the greatest results of this conflict was to bring into full display the talents and resources and influence of Mr. Clay." Often had he to do over again his Sisyphus work, only to meet the usual fate of mediators. He did not at the last prevent secession; he did ruin his own political hopes.

In 1832, a space of only twelve years after Clay had laid the Demon of Disunion, as he thought forever, it was rampant again; and worse than ever, for now South Carolina began proceedings to administer on the effects of the Union. John Randolph, who hated Clay and had so bitterly aspersed him in the Senate that a duel had resulted, now said, "There is one man, and one man only, who can save the Union; that man is Henry Clay. I know he has the power, I believe he will be found to have the patriotism and firmness equal to the occasion." The task of pacification was less difficult on this occasion than on the former as it involved no surrender of principle or sacrifice of sentiment on the part of the North. It only required a back-down of the general government in regard to its fiscal policy and the surrender on the part of Clay of the protective tariff system to which he had devoted the best efforts of his legislative life. This was cheerfully laid upon the altar of the Union; South Carolina consented to take off her things and stay a while longer.

In 1850 it was all to do over again, because California wanted to come in without slavery. Clay, now old, feeble, tottering toward the tomb, was once more called to the rescue of the Union. One of the memorable dramatic situations in the history of the Senate, and at the same time the most heroic and pathetic scene in Clay's life, was his pacificatory

speech upon the introduction of the compromise measures of '50. He needed to be helped up the steps of the capitol on the appointed day, and was urged to forego his effort until he should be stronger. "No," replied the aged patriot, "I consider our country in danger, and if I can be the means in any measure of averting that danger, my health and life are of little consequence." The chamber, galleries, lobbies, and halls were packed with people, the most distinguished of the land; many of whom had come from distant cities to hear Henry Clay's last speech. Very feebly he began, but under the uplifting love and sympathy of the great audience the old fire returned. During two days he spoke; explaining his plan, imploring peace, pleading for the Union as the last hope of man, denouncing secession with fiery wrath, prophesying implacable, endless war from these mad councils. When he had concluded there was a wild rush of men and women to shake his hands and to kiss him. The compromise was carried, notwithstanding Calhoun tried to obtain the passage of a substitute providing for the election of two presidents, one for the North and one for the South, and Toombs defiantly proclaimed that he would yet call the roll of his slaves on Bunker Hill; while Seward and Chase, on the other side of the chamber, denounced the compromise and declared that it would settle nothing; that the conflict was irrepressible. Clay lived to see his compromise carried and generally accepted; to see it adopted as a finality in the platforms of both parties in the presidential campaign of '50; and died happy before the final upshot of it all—the Civil War. The sight would have broken his faithful old heart.

This was Clay's last great public service. He lingered in the grasp of a painful disease until June 29, '52, dying at his post in Washington. "The best and first of the land are daily and hourly offering tokens of their love and esteem," wrote his son from his bedside to his aged mother in Ashland. "He remained a winner of hearts to his last day," says Schurz.

No one has ever accounted satisfactorily for Henry Clay's extraordinary possession of his audiences. He seems to have hypnotized them. Seward says, "He held the keys to the hearts of his countrymen and he turned the wards within them with a skill attained by no other master. His conversation, his gesture, his very look, was persuasive, seductive, ir-

resistible." We are told much about his consummate oratorical art. There was, indeed, the tall, lithe, swaying, majestic form. There was the sharp, clean-chiseled countenance, with its deep-set blue eyes which melted or flashed with the emotions that burned behind them; the thin, large mouth—"shark-mouth," it was called, when he grew aggressive—which seemed always ready to break into an infectious smile; features of mercurial mobility upon which every emotion was photographed. There were the long arms waving and swaying as gracefully as willow wands in the breeze or projecting deeper passions in masses, like a catapult; the thin, bony fingers boring into the brains of his hearers—in a word, the whole man a finely-adjusted, powerful instrument every organ and fiber of which spoke. And, greatest of all, that marvelous voice. Said one who heard it, "Mr. Clay's voice has prodigious power, compass, and richness; all its variations are captivating, but some of its bass notes thrill through one's whole frame. To one who has never heard the living melody, no verbal description can convey an adequate idea of the diversified effect of those intonations which in one strain of sentiment fall in whispering gentleness 'like the first words of love upon a maiden's lips,' and anon, in its sterner utterances, ring with 'the maddening music of the main.'" When Randolph, Clay's enemy, passed through Washington to his Philadelphia death-bed, he demanded to be carried to the Senate chamber. "That voice, that voice!" he cried; "I want to hear Clay's voice once more before I die."

But all this does not explain a mastery of men which made them helpless captives to his imperious will. There was something deeper; something more masterful than eloquence, more mysterious than beauty, more moving than melody, more potent than all art. Such rapport often and often exists between two united lives; but rarely is one human being so surcharged with power over multitudes of souls. Once in an age rises a poet who is greater than all poetry, a painter whose power transcends all painting, an orator whose sway beggars the possibilities of oratory, an actor who is more than a histrionic king and lover, a woman whose empire over hearts makes mere beauty seem weak and foolish. There are deeper powers of man than all our philosophies even dream about.

THE ITALIANS IN THE UNITED STATES.*

BY C. L. SPERANZA, LL. D.
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The number of Italians in the United States in 1880 was, by the census of the same year, 44,230. But this number has kept increasing in the following years, so that it must, to-day, be in the neighborhood of 350,000.

During the same period of time a corresponding increase in the Italian immigration has taken place elsewhere, particularly in some of the states of South America, chief among them the Argentine Republic, where the increase has been, comparatively, much larger.

*This article belongs to a series on the various nationalities in the United States, begun in Volume VIII. of THE CHAUTAUQUAN. The papers of the series already published are as follows: The Irish in the United States. By John Hull. October, 1887.—The Germans in America. By Prof. Calvin Thomas. November, 1887.—The Scandinavians in the United States. By Albert Shaw. December, 1887.—The Welsh in the United States. By H. E. Thomas, D. D. January, 1888.—The Scotch in America. By the Rev. James G. Carnahan, LL.D. February, 1888.—The Swiss in America. By Charles Barnard. March, 1888.—The Chinese in the United States. By Wong Chin Foo. January, 1889.

The fact is that Italy has of late years become a country of large emigration. Previous to her political independence and unity, only such of her children emigrated as wished and were able to escape political oppression or military service at home, or had accounts to settle with punitive justice, or were driven by an unconquerable spirit of adventure. Even after the year 1870, when Rome was made the capital of the new kingdom, up to 1878 inclusively, the volume of emigration, according to the Italian statistics, did not exceed the moderate yearly aggregate of 27,000. This aggregate mounted to about 40,000 in the year 1879, but did not rise any higher until 1882, when it became 66,000. After a further rise to 68,000 in the next year, it descended to 58,000 in 1884, to start anew with fresh vigor, reaching in round numbers 77,000, 108,000, and 128,000 in 1885, 1886, 1887, respectively.

This exodus, largely of peasants and laborers, is generally considered "the logical sequence and completion of Italy's

sacrifice to her liberty and unity." The accomplishment of this great object and the building up of the country, together with the formation and maintenance of a powerful army and navy to protect it from external enemies, who may eventually find in the Pope a natural ally, have brought about the necessity of overwhelming taxes. These, falling more heavily on the land, in a country whose resources are chiefly agricultural, and at a time when increasing importation from America, Australia, and the Indies has depreciated the value of home cereals, have caused distress among the small land owners, so numerous in Italy, and misery among the peasants and laborers in general.

It is this misery—it is said—that causes so many thousands of people to leave their fair and beloved motherland.

Without denying the undeniable fact of the existence of wide-spread poverty in Italy nor the reasons assigned for the same, I think that the Italian migratory movement can and should be explained in a more satisfactory way. The following table containing some official data concerning the emigration of the year 1887 shows that the contributions to the aggregate emigration varied widely, both absolutely and relatively, from one region to another:

REGIONS.		Population by Census of 1881.	EMIGRATION.	
			Total.	Per 100,000 Population.
Northern Italy.	Piedmont,	3,070,250	12,180	396.71
	Liguria,	892,373	4,734	530.50
	Lombardy,	3,680,615	12,784	347.33
	Venetia,	2,814,173	26,239	932.39
	Emilia,	2,183,391	1,817	83.22
Central Italy.	Tuscany,	2,208,869	4,606	208.52
	The Marches, . . .	939,279	2,057	219.00
	Umbria,	572,060	45	7.87
	Latium,	993,472	0	0.00
Southern Italy.	Abruzzo-Molise, . .	1,317,215	12,447	944.95
	Campania,	2,896,577	20,786	717.61
	Apulia,	1,589,064	908	57.14
	Calabria,	1,257,883	12,038	1,028.55
Insular Italy.	Sicily,	2,927,901	4,148	141.67
	Sardinia,	682,002	1	0.24
Kingdom,		28,459,628	127,748	448.87

Similar and even greater variations are exhibited by the statistics concerning the contingents and percentages furnished in the same year, by the sixty-nine provinces of the kingdom and their respective towns, nay by the provinces of each region, and the towns of each province. The statistics of previous years back to 1869 offer like results.

They prove, moreover, that, sometimes, districts with a lower percentage of emigration are poorer than others where that percentage is higher. They also prove that, as a rule, those districts have kept sending abroad the larger percentages of population where the tide of emigration set in earlier.

These facts, then, seem to warrant the conclusion that poverty is not the direct cause of Italian emigration. In fact nowhere does poverty, of itself, determine any migratory movement, it only prepares the ground for starting it.

What actually produces it, is a general desire on the part of the people for improving their condition, coupled with the conviction that the improvement will really be obtained by emigrating. This conviction in the popular mind is at first chiefly effected by the example and the accounts, no matter whether truthful or otherwise, of the successful emigrants, by the money sent home by some of them, and then by the allurements held out by the numerous individuals who make

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money out of emigration. When the migratory movement is once fairly started, it acts by itself, for a time at least, as an irresistible impellent force. The impression it makes on the popular imagination is so strong that no amount of sound reasoning can prevent its effect.

The migratory tide thus started since 1880 has brought to these shores little less than 188,000 Italians. This number taken from a home population of nearly 30,000,000, as it is to-day, may appear not excessive when compared with the vast aggregate of 4,000,000 Europeans admitted to these shores during the same period of time. It may appear ridiculously small to the Scandinavians, who, with a home population of barely 8,400,000, are estimated at half a million in the said European aggregate.

Yet there is abundant reason to believe that our Italian population would have received scarcely two thirds of the new contingents had not the agents of the rival French and English navigation companies in the Italian ports, been of late successful in their efforts to divert to a certain degree the stream of Italian emigrants from the shores of South America to New York. This is much to be regretted, for every artificial addition to our Italian population increases the difficulties of its healthy distribution and definite settlement.

These difficulties are naturally great, as it will be readily understood. Let it be borne in mind that about fifty-five per cent of the whole immigrating force are peasants, ruined small farmers, and farm-hands; twenty-one per cent common laborers including a goodly number of seamen and of miners; twenty per cent skilled workmen, and the remaining four per cent, men belonging to the so-called liberal professions and other callings. It is true that they are, largely, able-bodied men between seventeen and forty-five years of age, strong, capable of endurance, accustomed to privations, determined to work, and intelligent. But they are generally poor; what means they possess are, with some exceptions, utterly inadequate to the undertaking of any enterprise of any importance. Although it is no longer true that most of them do not know the alphabet, it is still true that most of them are ignorant. And, what is worse, they are ignorant of the English language, so different from their own and yet so necessary to them. They are ignorant of the custom of this country and of its very size which many of them imagine to be about as large as that of Italy.

Let it also be remembered that only eight years ago the Italian population in the United States was of little or no importance either as to numbers, wealth, or influence; that more than one third of the same was concentrated in New York, largely in the city, one sixth in California, and the remaining scanty half scattered in small groups through the whole length and breadth of the vast republic. Plainly, a population of this description could afford neither connecting links, nor guidance, nor any other kind of assistance to the Italians who came here soon after the year 1880. Nor is this all. Three fourths and sometimes four fifths of these new-comers land in New York, where such of them—and they are many—as have been induced to come here by false representations or promises, or do not know where to go or what to do, are only too glad to grasp the offered assistance, indeed too costly and not soon to be dispensed with, of a rascally gang of Italians, once called *padroni*, now bosses, bankers, or contractors, who make New York their general headquarters. I need scarcely say that the unfortunate immigrants who fall into the hands of these vampires are doomed to a long ordeal of disappointments and hardships.

They constitute a considerable portion of what might fitly be called the *unsettled* Italian population. The remaining portion of it is mainly made up of immigrants, who come

here with the sole purpose of making a certain sum of money in the shortest time possible, and then returning home.

Most of these people are employed in the construction of railroads and the digging of canals, in the loading and unloading of ships, in mining, farming, and gardening, or in the brick-yards, the rubber goods, and hardware factories. Such of them who are not able to find work of the above description, or are not willing or strong enough to stand it, turn waiters in restaurants, fruit-venders, street-sweepers, organ-grinders, shoe-blacks, and rag-pickers.

To this class belong largely those Italians who crowd the "Five Points" of New York, or the poorest quarters of other cities, living in dirt, eating wretchedly, and bringing discredit to the whole mass of their countrymen. Unfortunately, the public press seems unable or unwilling to discriminate between Italians and Italians, to bring to notice not only what is blamable, but also what is laudable in their conduct, to indicate the real causes of their evils, and to suggest and discuss means of remedying them.

Yet even the poorest, humblest, and dirtiest Italians contribute less than their "per capita" share to our hospitals, and still less to our poor-houses, although the hard, unhealthy, and dangerous work in which they are frequently engaged, kills, injures, or disables so many of them. In this same class many are found, who, by continued self-denial, toil, and honesty, succeed in the course of a few years in bettering their condition. In the meantime they have acquired some language, have learned something of the customs of the country, laid aside their savings, and thus enabled themselves to return to the trades for which they were fitted at home, or to extend their new business, to break away from unhealthy and dirty quarters, and to live in comparative ease with their families. Then their original project of going back to their native land is very frequently dismissed; and they become good and useful American citizens.

The Italians, as a people, are unobtrusive, not given to drinking, peaceable, and good-natured, but insult, ridicule, or interference with their love affairs, will set them mad. This is particularly true of the southern Italians, especially when they are in foreign countries, where they feel that they cannot practically obtain legal protection.

It is also undeniable that, on the whole, Italian immigrants, in the past, have shown a tendency to concentrate in one state, that of New York particularly, or to go as short a distance from there as possible, and, what is still worse to congregate in the larger cities, thus failing to give to agricultural localities and pursuits contingents adequate to their numbers and their original calling. Happily, a great change in the right direction has taken place of late years. Since 1880 the settled Italian population has kept on increasing steadily, and settled population here means Italians who have gained in enlightenment and met with success. Of course the word success must not be taken as meaning wealth or prominence of social position, but actual improvement on previous condition of existence. It is on these successful settlers that the future of the Italian population in this country greatly depends. It is they that furnish to the new-comers the connecting links, the assistance, and guidance which have been so long and sadly wanting. The salutary effects of their money, experience, and enterprise, as well as of the knowledge they have acquired of the best ways of serving their own interests by serving those of their kindred new-comers, are making themselves manifest.

In the last four or five years not less than fifty Italian periodicals and daily newspapers have sprung into life, whereas only five or six were formerly published. Numerous churches, where the services are conducted in Italian and

English, have been erected and numerous schools and helpful institutions of all kinds have been established whose wholesome influence can never be over-estimated.

The spirit of association for economical purposes is also manifesting itself to no indifferent degree and in various forms. Very useful in this connection have proved some associations formed with the object of attracting the Italian peasants to California and Texas, or facilitating for them the way to buy land or build dwellings, or of promoting the cultivation of the vine and of the mulberry tree, or the agricultural interests in general.

One of the most important results of all these influences has been a healthier distribution of Italians. This is shown by the following table, giving what I estimate to be probably the Italian population at present in such of the states as had the largest numbers in 1880:

STATES.	ITALIAN POPULATION	
	As estimated at Present.	As estimated by United States Census of 1880.
New York,	75,000	15,113
California,	45,000	7,537
Pennsylvania, . . .	30,000	6,100
Louisiana,	19,000	2,527
Ohio,	19,000	1,064
Illinois,	17,000	1,764
New Jersey,	15,000	1,547
Missouri,	7,000	1,074
Connecticut,	7,000	879
Nevada,	4,000	1,560

A glance at this table shows that, while the increase has been in the ratio, roughly, of 5 to 1 in New York and Pennsylvania, and of 4 to 1 in Nevada, it has been of 6, 7, 8, 9, and 9½ to 1, respectively in the other states. Nor is this all: states and territories not given above, which in 1880 had seen no Italians or had received only a few hundreds of them, count them now by thousands. Thus Massachusetts and Rhode Island count 12,000 and 4,000 respectively, Delaware 3,000, Virginia 6,000, Kentucky 5,000, Tennessee 7,000, Michigan 4,000, Wisconsin 8,000, Texas 10,000, New Mexico, Colorado, and Oregon 4,000 each. The remaining states and territories have numbers varying from 2,500 to 100.

A most encouraging fact is that agricultural localities, where the climate agrees with the Italians, and the soil is favorable to the kinds of cultivation to which they have been accustomed, begin to attract them as they never did before. A veritable stream of Italian peasants has begun to direct itself to North Carolina, South Carolina, Florida, Arkansas, Kansas, and Texas. But even this latter state has been left far behind by California, which seems destined to become a sort of Promised Land to the Italian farmers. Their numbers there have increased rapidly and their prosperity is a subject for hearty congratulation.

Aside from the industrious and thrifty class of farmers and gardeners, the Italians in the cities and towns are found pursuing every calling. Besides the thousands of common laborers, numerous are the mechanics, workers in brass and iron, workers in marble, decorators, engravers, designers, goldsmiths, and cabinet-makers; and they are eagerly sought for and liberally paid. Very numerous are the shoemakers and barbers. The serving class furnishes a large contingent to restaurants and hotels but a very small one to private families, although Italian servants enjoy, as a rule, the reputation of being most devoted and faithful to their masters. A thriving business is done by keepers of restaurants and hotels, not a few of which are quite popular even

among Americans. Nor are there wanting prosperous merchants, manufacturers, and professional men, and their ranks keep on filling up steadily.

The eagerness of the Italian immigrant for acquiring the English language is surprising and more surprising still is his readiness to learn it whenever he is taught. If he cannot learn the language himself he is anxious to have his children learn it.

At home and abroad the Italian shows a good deal of political good sense; he is law-abiding and takes no stock in socialistic or communistic doctrines. That the Italians in this country have not thus far shown any great proclivity for going to the polls cannot be denied. But the inference that they take little interest in the affairs of the country may be wrong. In mingling with Italian immigrants of the poorer class I have often received the impression that they

cannot easily overcome a feeling much like that one experiences as guest at another's house, which restrains them from sharing with the native American in the control of the affairs of his country.

The Italians, as a people, are blamed for being lazy and passionate, and the responsibility for these faults is generally ascribed to the climate of their country and their former political condition. Whether the former charge is just or not is a question which we will not discuss, but we will say that America is just the country to afford the remedy for these faults. Let her bestow it upon the Italians and she will reap the benefit that is likely to be derived from their universally acknowledged good qualities, namely, native brightness and keenness, hereditary artistic disposition, cheerfulness, and a large spirit of abnegation and endurance.

THE GLADSTONE FORTUNE.

BY C. De VARIGNY.

Translated for THE CHAUTAUQUAN, from the *Revue des Deux Mondes*.

In 1832 the voters of Newark had assembled for the purpose of electing a member of Parliament. Newark was then a borough and belonged to the Duke of Newcastle. Proprietor of the land and of the houses, he also claimed the vote of the inhabitants, to whom his steward always designated the duke's candidate. This simple proceeding was sufficient to assure an election. The borough voted as one man without disturbing itself to inquire regarding the character or the political opinions of its representative. The voters, the tenants of the great lord, were dependent upon him; he could eject them, could rent to those who would carry out his wishes, could impose at will prohibitions which suited him. He supplied vacant curacies; his displeasure was redoubtable, his favor all powerful.

"Thirty-one noble families," says Sanford, "counted then one hundred ten of their numbers in the House of Commons, and these thirty-one families weighed as much in the political balance as London and the forty cities which come nearest it in size, taken together; as much as Ireland; and twice as much as Scotland."

That was only a little more than fifty years ago, and yet on going back to it in thought we seem to be entering a world and a social organization from which centuries must separate us. But we can take by the hand some of its representatives still living. A curious world—so near and yet so far away! In it Charles Dickens made his entrance into the literary world by publishing the first sheets of "Pickwick Papers," which set all London talking almost as much did the maiden speech of Disraeli. D'Orsay, the king of fashion, replaced Beau Brummel. At the Gore-House were to be seen Landon, Marryat, Campbell, Tom Moore, Louis Napoleon; at the house of Lady Holland, Grattan, Curran, Lord Eldon, Macaulay, and Sydney Smith. At the Cock, met Tom Hood, Leigh Hunt, William Thackeray, and a thoughtful young man concerning whom all agreed in predicting bright prospects—Tennyson, the future poet laureate of England. There was also to be seen there another young man, delicate in appearance, of whose political inclinations they talked much, but whose strength they thought would not allow him to reach his aspirations. This was William Gladstone, the future premier, he whom his contemporaries have named the "Grand Old Man," the candidate whom the electors of Newark upon the bidding of the Duke of Newcastle, had just sent to a seat in the House of Commons.

He had been elected almost unanimously. On election day a single voter had asked who this Gladstone was, for whom the votes of Newark were solicited. The steward of the duke replied that he was the son of a wealthy Liverpool merchant, who was a friend of Canning. The opponent, if such he was, declared himself satisfied and voted for the delicate young candidate whose strong old age is a constant surprise to England. Thus entered upon the political arena the man who during more than half a century has filled it with the brilliancy of his eloquence, the renown of his name, and the boldness of his evolutions and conceptions. In him are summed up the aspirations, the high views, the ambition, and the energy of an old Scotch family, originating from the middle class, but steadily mounting higher with each generation, gaining a fortune, then opulence, and by a supreme effort, placing this one of its descendants upon the highest place which an English citizen can reach, at the side of, and at times even above, the throne. During these years he has known how to ably sustain himself, to oppose himself to a hostile court, to leave it, then to return to power, and, removed again, to show himself almost as powerful and certainly as redoubtable as when he stood at the head of government. His political rôle is not yet finished and he feels himself perfectly able to carry on his robust shoulders the increasing burden of the affairs of the British empire.

"I certainly do not know why," he said in a celebrated speech given at Liverpool in 1872, "English commerce should not pride itself on its old families in which the calling of the merchant has descended from father to son. Elsewhere, this has been made a matter of honor. Why should it not be so with us? It is a subject for sadness and for reproach to see wealthy merchants blush at mention of their business and deny the source of their fortune. Neither my brother nor myself will ever do that. His sons walk in his footsteps, and I am proud to say that my son is a merchant as was my father and as is yet my brother."

He spoke truly, and had reason to be grateful. Without the persistent toil of six generations which had preceded him, without the great wealth amassed by his father, the owner of Hawarden had not been the candidate of the Duke of Newcastle, the representative of Newark in Parliament; another name than his would probably have figured in the British records, and the remarkable intelligence brought into the service of its public would have been occupied in secur-

ing the place which his father gained for him after having himself inscribed the name of Gladstone upon the golden book of Liverpool commercial enterprise.

The founder of the family seems to have been a William Gladstone, a small brewer of Biggar, who died in 1728, leaving three sons and one daughter. One of the sons of this ancestor left eleven children, among whom was Thomas, the grandfather of the statesman; and he had sixteen children, of whom twelve survived him. By means of hard labor he succeeded in providing for each of these children a modest fortune and in thus aiding them in their entrance upon the duties of life. John, his oldest son, and the father of the Grand Old Man, succeeded in many times multiplying this fortune and in securing for his son that large independence so necessary to a man called upon to direct the public business of a great state.

John Gladstone, the father of the prime minister, was born at Leith in 1763, received an education as complete as comported with the ideas of the time and the position of his father, and entered the business office of the latter. Thomas Gladstone was then engaged in the grain trade. A ship loaded with American wheat and directed to Liverpool had been consigned to him by one of his correspondents. John received from his father an order to go to Liverpool and to make the best sale possible for this consignment. He transacted the business with the house of Corrie and Co., one of the most important in Liverpool; and the head of the firm, struck with the intelligence and the business-like manner of the young man, wrote to Thomas Gladstone proposing that he should leave his son with him. The proposition made was a very advantageous one and was not refused. In 1784 John was established at Liverpool in the employ of Corrie and Co.

The port of the Mersey began to assume importance. From 1700 to 1750 it was greatly enriched by the tobacco trade, and its population increased, during this first period of prosperity, from 5,000 to 18,500.

From 1750 to 1807 Liverpool was the principal port for the fitting out of slave ships, and this sad industry was just reaching its meridian when John Gladstone entered upon his business career. In the year 1709, the first ship fitted out for the slave trade had realized such profits, that others hastened to enter the business, and in 1753 there were not less than eighty-eight ships engaged in the traffic in human flesh. From 1795 to 1804 the ship owners of Liverpool transported 323,770 slaves from the coast of Africa to America and the Antilles. Liverpool lived and flourished upon this lucrative commerce, and to its maintenance the existence of the city seemed firmly bound. John Gladstone, as the others, committed himself to it, calming the scruples of his conscience by the argument constantly repeated, that without slavery the development of America would be retarded, and the working of its vast sugar, coffee, and cotton plantations must be abandoned; that taking all things together, negro slaves had less of which to complain than free negroes, decimated as they were by famine and by their perpetual wars.

Thus the efforts of Clarkson, of Roscoe, of Wilberforce, seeking in the name of humanity the suppression of this inhuman traffic, found little echo in Liverpool. John Gladstone was one of the most ardent enemies of the abolitionists. In a few years he had justified the predictions of Mr. Corrie, and the latter appreciating the important service which the young man had rendered his house, took him into partnership. At the very beginning he proved himself worthy of the choice. The grain harvest had failed in Europe. The Corrie establishment saw the possibility of realizing enormous profits by importing wheat from America.

John Gladstone was put in charge of this enterprise, and set out for New York prepared to make heavy purchases. Twenty-four ships were to follow him and bring back the grain to Europe. At that time communications with the New World were few and slow; business operations were carried on largely by chance; uncertainties, or doubtful estimates were given, risks were taken. When after forty days, John Gladstone reached America, he learned that the crops which promised well in the spring, had proved to be no better than in Europe, and that the wheat would scarcely suffice for the home consumption; and he could not purchase enough to load even one ship.

The blow was a heavy one. In order to fit out the fleet which had followed him, the Corrie house had drawn heavily on its capital; John Gladstone knew that it had almost staked its existence upon this venture, and that the return of these twenty-four empty ships would be for it a disastrous event. Upon him devolved the task of averting it. In the impossibility of consulting with his associates, he had to rely entirely upon himself, and act with decision and promptness. A rapid visit through New York, Boston, and the Southern States gave him a knowledge of the merchandise of those different markets. If the grain had failed, by way of return sugar, coffee, and cotton were abundant. He decided to load his ships with these, and thus returned to Liverpool. If this expedition undertaken by the Corrie house did not yield the brilliant results which had been hoped, at least the bravery and wisdom of its youngest member prevented the disaster which was looked upon as inevitable in Liverpool after the arrival of letters announcing the failure of the crops.

From that day the establishment of Corrie and Co. ceased to limit its operations to dealings in grain. The initiative of John Gladstone had opened to it a new field, and he knew how to work it profitably. The relations formed between him and the planters continued, and little by little Corrie and Co. became the leading house importing the products of the Southern States. Sixteen years later Messrs. Corrie and Bradshaw retired with great fortunes, and John Gladstone remained sole proprietor. He then took into partnership his second brother, Robert, calling him from Leith; and later, in proportion as the business grew, six other brothers were successively added to the firm. Thus the whole family was transplanted to Liverpool. The new firm, Gladstone and Co., took rank among the leading houses of the world, and its head, the owner of important plantations in Demerara, the importer of products by means of his own ships, saw every year his personal fortune enlarging, and the reputation of his house increasing.

He was not only a merchant, a ship owner, and a planter, but also a large slave owner, and that at a time when under the influence of the earnest efforts of abolitionists, public opinion against slavery was pronounced. The enthusiastic and persuasive eloquence of Wilberforce gave rise to one of those irresistible currents which triumph over all opposition. John Gladstone was too shrewd and too wise to attempt to stem the tide. He felt that slavery was condemned; he resigned himself to it, insisting only that they should proceed in the matter with great consideration, maintaining that a sudden emancipation would be as disastrous for the slaves who would cease to labor, as for the masters who would cease to nourish them; and that, to the one side as to the other, the government owed indemnity and help. These theories which he conscientiously held, were in accord also with the views of sensible abolitionists. Upon this standpoint an agreement was possible, and it was made.

This period of agitation was for him most difficult to meet.

His commercial success, his rapid fortune, had aroused against him many enemies who missed no opportunity of representing him as one of the determined partisans of slavery, as a man who owed to it his wealth, and who worked without mercy thousands of negroes, the victims of his cupidity. Lord Howick, badly informed, in a debate before the House of Commons cited his name as one of those whose inhuman treatment of the blacks brought shame upon England. But Lord Howick soon had to do with a strong defendant. The new representative from Newark had just entered the House, and his first speech was an able and eloquent refutation of the attacks directed against his father.

The emancipation bill was passed and an indemnity of £20,000,000 was allowed to the planters. John Gladstone received his share of it; and, confident of the future of Liverpool, when the suppression of the slave trade caused a considerable decrease in the value of real estate, he bought largely. In a few years it trebled in value. He also proceeded to acquire possession of several ecclesiastical benefices, the ownership of which to-day is still in the hands of his son. Deeply interested in George Canning, whose eloquence he admired, and whose greatness he foretold, he decided to present him as candidate for Parliament from Liverpool, and Canning not being in a condition to meet the expense of an election, he took it upon himself. Thanks to the active course and the influence of John Gladstone, Canning was elected, and having become powerful, never forgot the service which had thus been rendered to him at the beginning of his political career.

Powerfully rich, an intimate friend of Canning, who was prime minister in 1826, John Gladstone, a candidate for Parliament from the borough of Woodstock, was elected with the help of the Duke of Marlborough. He held his seat nine years, long enough to see his son become his colleague and take a place at his side. He assisted in that assembly in which William Ewart Gladstone replied to the attacks of Lord Howick and repelled the injurious suspicions cast upon their name.

Born in the purple, William E. Gladstone was not only an heir to the great fortune built up by his father. Imbued from his childhood with Tory ideas, the public saw in him the future leader of that great party (with which he broke a few years later), the determined adversary of reform, the favorite of the Dukes of Newcastle and Marlborough. From early life he had been educated with a view to this high destiny; from early life also he had realized the hopes of his

father save upon one point. A most singular thing, this statesman, who was one day to become one of the most remarkable financiers of the United Kingdom, and to occupy for several years the high post of chancellor of the exchequer, this son of a merchant who excelled as an accountant, could not learn arithmetic. Dean Stanley relates on this subject that there was near Liverpool a little school where Mr. Gladstone sent his son to prepare him for Eton. Some years later a man who had been his classmate in this school paid a visit to the principal, and in the course of the conversation said to him, "There is one branch in which I declare I have not made any progress since I left you, and that is arithmetic."

"Indeed! You astonish me," replied the principal laughing, "for I remember that you were with Gladstone one of our worst scholars in figures, and you see that he is esteemed to-day the first of our financiers."

At Eton, then at Oxford, W. E. Gladstone was a brilliant student and left the University from the first rank. In the debating society of Oxford, a sort of miniature parliament where young men discuss the questions of the day and prelude the political struggles to come, Gladstone was one of the orators oftenest heard. He met there as adversaries or partisans the classmates whom he was to find again later in the House of Commons: Lord Selbourne, Lord Lincoln, Duke d'Abercorn, Sydney Herbert, Mr. Lowe. The two great parties which contested for power, the Whigs and Tories, had their eyes fixed upon this political hot-house where future orators were trained. They helped them to enter Parliament, which more than one did directly on leaving the University. It was for this reason that in 1832 the Duke of Newcastle offered to this young man twenty-three years of age the votes of Newark, and that the future premier of England took his seat in the House of Commons. A little later, his rival Disraeli entered the Commons under the same conditions.

Since then fifty-six years have passed away, and the name of William E. Gladstone, the son of the merchant prince of Liverpool, has resounded over Europe, has been connected with all the great events which have agitated the world. This long career which is not yet ended, and which has been so fertile in bold evolutions, reserves, perhaps, still other surprises. It belongs to history. But who can say whether without the energy and intelligence of the great-grandson of the small brewer of Biggar, the name of Gladstone would have figured in the first rank of great names in England?

HUMILITY.

BY ANNIE BRONSON KING.

There is a grace we oftentimes forget,
Which yet doth shine the whitest of them all.
He whom the Romans, Philip Neri, call,
Knew well, not perfect was the coronet
Unless this one fair virtue ruled the rest.
Unto the Fathers in the council-place
The word was brought that God had sent the grace
Of prophecy into a young nun's breast.
"Go, Philip, learn," they said, "if this be true."
He travel-stained into her presence came,
Bidding her loose his sandals. Angry shame
Dyed all her face. Swift homeward Philip flew,
With, "Holy Father, here's no care for thee,
No miracle, since no humility."

WATER SUPPLY FOR SMALL TOWNS.

BY JOHN S. BILLINGS, M. D., LL. D.
Surgeon, U. S. Army.

A town has often been compared to a living organism in respect to its growth and development. In the primitive stages of each, there is little differentiation; one store holds all the supplies, except those derived by each cell colony, or family, directly from the surrounding envelope or medium. Among these last, one of the articles of prime necessity to every individual living thing and to every collection of living beings is water.

In the earlier stages of development each individual organism or family gets its water from its own immediate vicinity, and the fact that it has no other means of supply, limits to a considerable extent its location and powers. As the animal increases in size and complexity of structure, there is developed in it an apparatus of tubes, pumps, and filters for circulating the necessary fluids to every part of its body, and for purifying these fluids after they have become contaminated by use in the tissues. In like manner, as the little group of half a dozen houses grows through the village stage to that of a town or city, the primitive arrangement of bringing in buckets from the spring, stream, or well, the water required for domestic use, gradually becomes unsatisfactory, and a demand arises for a general system of supply from a common source so arranged that in every house and in several parts of many houses all the water required may be obtained by simply turning a faucet.

When this demand arises, it is almost sure to meet with opposition on the grounds that it is expensive; that the town is getting on very well as it is and does not need it at present; that those who are making the demand are not agreed as to the source from which the supply should be taken, or as to the arrangements by which it is to be secured; and that there is some kind of a "job" in it, i. e., that some one will probably make some money if the plan is carried out. The result of all this, and of conflicting interests, has usually been that the introduction of a general water supply into a town has not only been unnecessarily and unwisely delayed, but has been carried out without sufficient forethought, as the result of a more or less unsatisfactory compromise. I propose, therefore, in this article to state briefly the reasons why small towns should endeavor to secure a satisfactory general water supply as soon as possible; what are the characteristics of such a supply; how to set about obtaining it; and what the presence of such a supply involves as regards disposal of the water which has been polluted by use.

A general water supply is desirable, first to save labor, to get rid of bucket-lugging; second, to promote cleanliness by increasing the facilities for it; third, to provide means for the extinguishing of fires, and for watering grounds and streets; fourth, to protect the health of the community; and fifth, to increase comfort and happiness generally.

The modes in which a general water supply tends to protect the health of a community are numerous, but may be summed up in the statement that it gives a purer and more wholesome water than can usually be got from wells or cisterns in a town, and that it increases the cleanliness of houses and of persons, thus giving a purer air to breathe. That the wells, springs, and cisterns in a town are always in more or less danger of pollution, and as a matter of fact are very often polluted is a very unwelcome fact to many

persons who will defend their pet wells with an enthusiasm which is not at all tempered with wisdom. We shall be told that this well is all right, the water is clear and sparkling and so delicious to the taste that the neighbors come to borrow. The gas that gives the sparkle and the salts that give the agreeable taste are themselves often the very things which should rouse suspicion.

Reflect for a moment on the probable sources of the water drawn from wells in a town. It comes from a sheet of water in gravel or porous strata which extends beneath and far beyond the town. This sheet of water is not still but is moving, slowly it is true, but none the less surely. Down into this great stream filter the slops thrown out of kitchen doors, the leachings from ash-heaps, foul gutters, cess-pools, and privy pits, slowly at first but faster as the ground becomes saturated. This process may go on for years without any very perceptible results. The well waters pumped out of this filtered material will become a little more sparkling, a little more cooling and agreeable to the taste, and the druggist sells more paregoric than he used to, but nothing definite is observed until suddenly the doctor observes that he is seeing a number of cases of fever—perhaps not a very definite form of fever, but still he suspects typhoid, and pretty soon he is sure of it. This outbreak will die out, but after that the town is liable to typhoid, and strangers who come to it are especially liable.

The French term for the water supply of a town is very significant, it is *alimentation en eau*, i. e., food supply of water. For water is a food, an absolutely necessary food, constituting as it does 58 per cent of the whole body, so that we may even say that man lives in water. At all events every tissue is bathed in watery fluids, and the vital processes occur in and through water, which is constantly passing off through the lungs, skin, bowels, and kidneys, and which must therefore be as constantly supplied.

An adult man requires from 60 to 90 ounces of water a day in his food and drink to make the internal mechanism of his body work smoothly, and he needs a much larger quantity to apply externally to secure cleanliness of person and a satisfactory condition of his skin, temper, and morals.

For all purposes the water supply of a town should not be less than 18 gallons a day per head of population, and to make this quantity sufficient, none of it must be wasted. The amount actually supplied per head is usually much larger than this, varying from 25 to 150 gallons per day, but in such cases a large part is either wasted or is employed for purposes other than the supply of private houses. The largest amount of water required for habitations of any kind is 50 gallons per head per day, which is the allowance for hospitals.

What should be the quality of this supply? The answer to this is that it should be as pure as it is possible to obtain at a reasonable cost. Purity of water is a relative term. No water obtained from natural sources is absolutely pure; it always contains some salts and some bacteria. The character and amount of foreign substances suspended or dissolved varies greatly in waters from different sources or different localities. Rain-water, caught as it falls from the clouds upon a perfectly clean surface, under special circumstances may contain a considerable amount of organic

matter washed from the air; and, as usually delivered into cisterns, the first washings from the roof are often very impure. In New Orleans, where the water supply for drinking is almost entirely from cisterns placed above ground, the deposit in these receptacles averages an inch in depth each year.

In a general way it may be said that the best drinking waters come from springs, deep wells, or from the washings of uncultivated and uninhabited uplands. Surface water from cultivated lands is more dubious, and streams or ponds to which sewage has access, or shallow wells, are dangerous, but to this general classification many exceptions must be made. A good drinking water should be limpid and cool, have a bluish tint, and no odor either when cold or heated, and when kept in a closed clean glass bottle it should remain unchanged. A very faint taste of acid and salt is agreeable, and is desirable if it does not depend on organic pollution.

In choosing a source of supply the proportion of salts of lime and magnesia in the different waters must be considered because an excess of these makes the water what is known as "hard," so that it does not readily form a lather with soap and is unfitted for laundry and cleansing purposes. It is not possible to fix a scale of the proportions of different substances which a good water should or may contain, but in a general way it may be said that in 100,000 parts of water there should not be more than 16 to 20 parts of lime, or 1 to 5 parts of nitric acid. As to organic matter the quantity is a matter entirely secondary as compared with its character or origin.

In selecting between different sources for a general water supply, the advice of a skilled chemist should be obtained, and he should be given full information about each source and, if possible, should collect his samples himself. The idea that a strictly impartial opinion is to be obtained by keeping the analyst in absolute ignorance of the source and surroundings of the place from which the water was taken, is a very unwise one; the more he knows the more reliable will be his opinion. There is no simple, easy method of testing the purity of a water which any one can use, unless indeed the water be so foul that it offends the sense of smell. In addition to chemical analysis, useful results may often be obtained by what is called bacteriological analysis, that is by cultivating the bacteria in the water to be tested in or on gelatine or other nutritive material and observing their character and number. This, however, cannot take the place of chemical analysis; it supplements it, and in most cases merely confirms it, though in exceptional cases it may furnish proof that the cause of a specific disease is actually present in the water, which proof is at present beyond the reach of chemical analysis.

The choice of the source of supply will in most cases lie between the subterranean sheet of water into which wells may be sunk, and some neighboring stream, pond, or lake, and will govern the particular mode of storage and distribution to be adopted. The question of cost must be considered as well as that of purity. The typical modes of supply are what are known as the gravity and the pumping systems, the latter having numerous variations and being often combined with the former.

A gravity system is one in which the water from a stream or spring is impounded, or collected, by means of a dam or reservoir, or both, or from a natural pond or lake, at such an elevation above the place to be supplied that the water will flow by its own gravity to the points where it is wanted. This form is most frequently used in hilly or mountainous districts. It is usually necessary to build a dam and pro-

vide a reservoir in connection with it, and this, in connection with the fact that the source of supply is usually at some distance, requiring the laying of a considerable amount of pipe, makes it often comparatively costly in construction; but on the other hand it is cheaper to manage than almost any other system. The average cost of construction of such a system for towns having less than 15,000 inhabitants is between \$20 and \$25 per head of population, and the average annual cost per year of operating is between 35 and 40 cents per head of population, or between 1.3 and 1.5 per cent of the original cost.

The system of pumping into distributing mains, either directly or through a stand-pipe, is the simplest and cheapest mode in a flat country, or where the water is taken from a series of wells. The cost of such works, for towns of less than 15,000 inhabitants, varies from \$10 to \$22 per head of population. The average annual cost of operating works of this size when the water is pumped directly into the mains is 80 cents per head, or nearly 4 per cent on the original cost; to a stand-pipe the cost of operating is a little less than that of the gravity system. These are of course only average figures. They are derived from the statistics of 139 towns of less than 15,000 inhabitants having the gravity system, and of 62 towns of the same size having the direct pumping system. In 23 towns of the same kind, having a system of pumping to a distributing reservoir and mains, the average cost of construction was \$18.07 per head of population, and the annual cost of maintenance was 30 cents per head, or 2.17 per cent on the original cost.

Details as to arrangement, cost, etc., for a large number of towns in both eastern and western United States will be found in a report by Mr. W. G. Elliot, printed in Vol. XVII., of the "Reports of the Tenth Census"; being Part II. of the "Reports on Water-Power," under the direction of Professor W. P. Trowbridge, of Columbia College, New York City.

Suppose now that in a town of one or two thousand inhabitants it has occurred to a few intelligent and enterprising citizens that it is time that a general water supply should be introduced for cleanliness, convenience, and safety, how should they set about it? One of the first questions will be, shall the town own its own works, or shall some private corporation be contracted with for the purpose? The formation of a private corporation seems to have been the favorite plan for smaller towns with the exception of those taking a direct pumping system, two thirds of which own and run the works themselves.

If the greater part of the stock is held by citizens of the place who are interested in good work and good management, it is probable that the private corporation will give quite as good and as cheap results as the municipal government would, while it is much more easy to get the work done promptly through the corporation.

If the works are built on speculation by outside parties who have no personal interests in the town and whose object is to get as much and give as little as possible the results will be dubious.

The best thing to be done at first is to get an engineer of practical experience in water works, and not connected with any particular system of pumps or machinery, to make a general preliminary survey of the place and advise as to what should be done. This will cost two or three hundred dollars, and will probably save two or three thousand. If the work is to be done by a private corporation the contract with the town should be carefully drawn under the advice of such an engineer, specifying the kind of pipe and mode of laying, number of fire plugs and fountains to be supplied

free of charge by the company, rates to be charged to consumers, and many other technical details which would be out of place in a paper like this.

If it be decided that the work shall be done by the municipality, a well trained engineer should be employed to plan and supervise the construction of the works, his plans to be approved by some skilled water-works' engineer; and there should be a definite understanding that he is to become the municipal engineer and take charge of the operation of the works as well as of what is to follow. From the very commencement the introduction of water pipes into houses should be made under regulations, to prevent waste and to allow easy inspection as to whether such waste is going on. It will also be wise to forbid the use of fittings not approved of and stamped by proper authority. Cheap faucets and draw-cocks are very expensive to the corporation or town which has to pay for their inevitable leakage.

The introduction of a water supply involves arrangements for the removal of this water after it has been used. It should be made use of to carry off all the excreta of the place, and,

for towns of the size I am considering, this is best done by a system of small earthen pipe sewers. Sewers and water supply are almost inseparably connected. You cannot have the former until the latter has been secured, and the sooner the sewers follow the water pipes the better. It is the combination of the two that pays as an investment. As the future inhabitants are to have all this benefit, it is fair that they should meet part of the cost, and hence raising the money by bonds, with provision for creation of a sinking fund which will redeem them in about forty years, is a very proper way of meeting the first outlay, while at the same time such bonds are a good investment.

To the people of all the many towns which as yet have no general water supply, I would say, make up your minds promptly that you must have it, get the advice of a skilled disinterested engineer as to how to best secure it, then go ahead and obtain it in perfect security that you are doing a humane and wise thing for which your children and your children's children will have good cause to be grateful to you.

A DAY AT AN ARIZONA RANCH.

BY BYRON D. HALSTED, Sc. D.
Of Rutgers College.

It was the middle of February and at a time when all through the Mississippi Valley a blizzard raged with fury, striking terror to the heart of every one whose lot was cast within the sweep of its relentless besom. A heavy rain detained us at Los Angeles, California, for in a few hours the broad, dry river-bed was covered by a flood more repulsive than the Missouri, and almost as rapid as the Niagara. It swept away the railroad and carried the homes of the dwellers in the low lands upon its turbulent and cruel tide. We took the first train over the hastily repaired bridges, preferring to run all risks in travel rather than to remain in a city which was almost literally swimming in mud.

The Eastern bound train left the "City of the Angels" several hours behind the schedule time and thereby brought us into Benson, Arizona, in the afternoon. Here we were to visit the ranch of some old friends. They were New York people. The husband once held a good position on Broadway, was careful of his dress, stylish from boots to silk hat, but went to Arizona for health and wealth. Two years had wrought some changes in him. Instead of the pale face, close cut hair, gloved hands, slender cane, and measured gait, there approached a person in high cow-hide boots and a broad, gray sombrero, the space between being clothed with brown woolen shirt, broad collared and braided in front, and coat and trowsers. The slender cane had long ago given place to a large seven-shooter, which in that land is considered the best of company for any man. The sun and dry air may tan the face and the throwing of lassos can harden the hands, but it requires more than two years to change the heart and disguise the voice. He was glad to see us in a place where congenial meetings are unusual, and we greeted him as protector as well as friend, for there was a feeling that here human life is both rare and cheap.

Benson is large only upon the railway map. In place of the wide and regular streets with long blocks of fine buildings, which fancy paints for unknown towns, there were a few low wooden buildings trying to keep in a short, much broken line before a broad area of barren sand. Not a tree or shrub cast any shade in the desolate forsaken town of perhaps a hundred souls.

The ranch to be visited was nine miles away and the almost continuous ascent of nearly five thousand feet was made in an open two-seated wagon and over a trail which could have been followed only by an experienced guide. As we left the forbidding, sleepy village behind, the Whetstone Mountains were before us, dim with distance and the gray of the early twilight. The dry half-covered yellow earth on either hand bore scattered yucca plants with their short, stiff, stout, and graceless trunks, of a man's length, while here and there the century plants had sent up their tall flower stalks during the last rainy season, long past, and had perished in the struggle to be fruitful. All forms of vegetation bore the evident marks of hardship and intensified the barrenness of the scenery. No trees greet the eye until the ranch is neared, and then the live-oaks, of fair size, although small as compared with those of Southern California, added an indescribable charm to the landscape.

Evening had set in when we reached the home of our driver—a neighborless ranch at the foot of the Whetstone Mountains. The housewife, once accustomed to the best advantages of the metropolis, a graduate of a New England seminary, had been making paper roses for a church fair to be held in Tombstone, twenty-seven miles away, and the completed flowers, with the remnants of bright paper, were scattered upon the sofa, and in the midst nestled a huge revolver, encompassed by a belt of cartridges.

The main house consists of a sitting-room and bed-room, separated by a curtain of a modern sort with a pole and rings suited to the furniture of a stylish city home. Everything was suggestive of the taste and refinement of an Eastern dwelling. A Winchester repeating rifle stood in one corner of the room close below an engraving of the "Huguenot Lovers." On the little table was the last number of a popular magazine, and the latest improved revolver. Bible and bullets need not replace each other simply because the unwritten laws of this otherwise somewhat lawless land demands that lead and powder shall stand guard over the interests of individuals as the forts and mighty cannon keep the peace between the most enlightened of nations.

In another building, near by, the table was soon spread

with hot fragrant venison, delicious coffee with whipped cream, and the various accompaniments of an appetizing dinner, all of which inspired a still deeper feeling of satisfaction with the first taste of ranch life in Arizona. It was midnight before the conversation lagged and long since the light of the nearest neighbor, seven miles away, had gone out and only the stars kept watch through a cloudless sky, over a land where the war-whoop of the Indian and the roar of the mountain lion have for countless ages been as echoes to each other. Just as the word for retiring had been hesitatingly spoken, there was a shout from outside and the sound of advancing feet. As new-comers we did not know what to expect and instantly thought of some bloody deeds of Apache cowardice and cruelty enacted in that region within the year and related to us during the past hours by an eye-witness. During this brief period of suspense the host had gone to the rear door and obtained the necessary information. It was "Pete," the herdsman of the ranch, who at this late hour had returned from the mountains. At his feet lay a big stag, the fruit of his deer hunting. It is the delight of this almost giant man, when his work for the day is done, to take his favorite rifle, go up into the Whetstones, a few miles back of the ranch, and bring down "something for breakfast." The exploits of this mountain hunter would fill a thrilling volume. The skins of various wild animals ornamenting the floors of the house, and the great wings of birds upon the walls are a few of the trophies of his skill and daring.

Early the next morning we caught the first glimpse of the measureless view obtained from the ranch. The irregular shadow of the Whetstone Mountains extended far beyond the little cluster of buildings and gradually came up the slope from the west and in front of the ranch, like a retreating wave of darkness, leaving bare the shining shore of earth and desiccated herbage. If a person's ideas of nature in its primitive wildness have been gathered in the Adirondacks, White Mountains, at Niagara, or Lake George nestled in the arms of its many protecting hills, then a new experience is needed of a scene broad enough to include all these, and the ocean in its vastness and solemn grandeur besides.

From the mellow shade of a wide-spreading live-oak, overhanging the door-steps, a broad valley is seen stretching away to the westward until abruptly stopped in its gentle ascent by the Dragoon Mountains which stand with perpendicular sides and keen-angled pinnacles, a picture of the impenetrable abiding place of demons and giants. The somber thought is heightened as we listen to the tales of fiendish slaughter caused by the treacherous Apaches who from this mountain stronghold defied the nation's bravest soldiers and bathed the broad territory in innocent blood. As we gaze Cachise and his tribe of dusky devils seem to come from the rocky chasms and stealthily creep out into the valley; but the ranchman assures us that the fantastic figures are great cactus trees which stand here and there like specters to remind one of the unneighborly habits of nature in this land of magnificent distances.

Far away to the north are indistinct irregular banks of snow, the visible white, back of the San Bernardino Mountains, too far to seem above us and too distant to give a chill to the warm air of the valley. To the south the sun lights up the peaks of the Hauchucas, and the great patches of snow lie like ingots of silver in a matrix of azure. From this pure perennial source the city of Tombstone pipes its icy water, yet leaves an abundance to feed the springs which flow as a perpetual benediction upon their fortunate owners. At once the eye may sweep over a grand variety of wonderful views, but they are all blended in a never ceasing,

solemn, distant, awful harmony. Every hour of the day brings new lights and shadows. At mid-day the valley lies sleeping in a mellow haze through which the smoking locomotive draws its freight, slowly, lazily, and silently, because so far away. The field-glass may shorten the distance by a half but it only magnifies the stillness. The sweeping glass brings Contention and Tombstone into view, towns which in their names preserve something of their past, if not of their present character. Deeds of darkness, border cruelty, theft, bloodshed, and a long catalogue of unclassified and indescribable crimes are sadly commingled in the early history of these cosmopolitan towns. The white man here has often out-Apached the Apache.

The ranch at which the day was spent, is located where it is, because here on the western slope of the Whetstones has for long ages flowed a spring of water at which the early Indians quenched their thirst while on the trail from one mountain fastness to another. A spring of flowing water is so precious in this arid, half desert country that when once possessed, it holds the surrounding land as securely as a patent from the government. A ranchman buys a "water-right," and the territory it controls depends upon the proximity of another spring. There are vast areas in Arizona and New Mexico where the grasses grow but no stock feed upon them because water is too far away. The Whetstone ranch has three springs, two near the house, and the third, the oldest and freest-flowing, about a mile away. These three together are worth several thousand dollars. From them as central points the live stock, a hundred head or so and rapidly increasing, can wander for ten miles or so into the valley or ascend the foot-hills in search of herbage. If a neighbor's cattle get within the same circle they need to return to their own spring for water. A passing Mexican wood-chopper on his way to the mountains for fuel has no more right to water his team at one of these springs than to enter the house and take a loaf of bread. In fact we were told that as high as five dollars had been offered and refused for a single drink for a wood team. Once the right granted, the key to the mountain forests is secured, and in time the ranch is doomed. Clear off the trees, and the snows which now feed the perennial springs, would soon melt each spring, form transient surface streams, and the wild gramma grass would grow uncropped by the branded cattle.

Secondary to the water supply is the corral. This is made of medium-sized poles driven close together so as to form a stout fence, ten feet high, inclosing a space sufficient to quarter a herd by night. This stockade is rectangular or any shape suited to the pleasure or convenience of the owner. At one side is a wide heavy cattle gate and at another a narrow entrance for the herdsman. On horseback the herder in his picturesque garb goes into the recesses of the foot-hills and with shout and whip brings in the milk-laden kine. Twice each day the large bright buckets are taken to the corral and each cow, known by name and caressed by all, gives her portion which goes to make up the "setting" in the row of pans upon the long hanging shelves in the capacious milk-room. Butter-making is the chief business in which the family is engaged, and the milk-house is the main building of the ranch. It is a one-story, thick-walled structure, sixteen by twenty-four feet, built of bricks of adobe mud, molded and dried in the sun. A second smaller flat roof of boards stands two feet above the first to secure proper ventilation and coolness. Within are tables, water tanks, churns, and butter-workers of the latest and most approved patterns. In one corner ready for market are the yellow rolls of sweet fresh butter. Twice a week this golden product is taken down to Tombstone and delivered to anxious

customers who are glad to pay a price that would be extreme for the finest gilt-edged half-pound prints on Murray Hill in New York City. With no great competition and no cost for winter keeping, the profits are large from this dairy. A good income helps to dispel the thought of isolation.

To one side of the *adobe* milk-house and as a lean-to built of the same material, is the saddle room; and from this you can pass into the sleeping apartment of the herdsman. On all sides is the dry surface of the *adobe* bricks except where some newspaper picture adorns the walls or square port-holes, left through the two feet of clay, furnish places for the discharge of the Winchester rifle which stands guard close by when not out upon more active duty.

The other buildings of the ranch are the house proper, to which the reader was introduced upon the evening of our arrival, and the culinary department standing only a few feet away. Both of these buildings are about the same, twelve by twenty-four feet, and each divided into two nearly equal parts. They are made of boards and as neither winter blizzards nor summer cyclones sweep that land, the construction is simple but not inexpensive, for the lumber in them, of only fair quality, costs seventy dollars per thousand feet.

The horses have a board stable and close by stands a stack of native hay. The wagon house is as broad as the plains and its roof reaches up to the cloudless sky. The big friendly dog has his kennel, and he may find some society in the companionship of the well-behaved hens and chickens.

To fully appreciate the place occupied by the most ordinary of pets in the life of the isolated family, one needs to go out upon the confines of civilization where the human face in its higher stamps is rare indeed, and of any sort uncommon. For some estranged souls there may be society in solitude but most of us are molded after another type and, if we cannot do better, will cultivate the best that is in cats and dogs, and caress a calf or colt with all the tenderness and affection that a majority bestow upon their children.

Toward nightfall we strolled up to the mountains, soon leaving the ranch out of sight behind the live-oak scattered everywhere—live-oaks whose great vitality permitted them to grow where nearly all other forms of ligneous vegetation fail. Now and then a dwarfed "mesquite" was found struggling with arid adversity, while cactus, century

plant, and yucca nestled close to the dry soil. All woody plants seemed to be armed with spines and thorns as if standing perpetually on guard, fearing that some half starved steer might rob them of their tenderest parts.

While standing there, at sunset, upon the side of a vast amphitheater of mountains and plain, the herdsman came up from the ranch on horseback. The stag he had shot on the mountains that afternoon was too heavy for him to "back" homeward and he had hastily returned to get the aid of a horse before the night set in. He told me that his timid game was bounding rapidly forward as he shot and the first bullet only grazed the shoulder, but by improving his calculation the next shot instantly brought the crazed stag to the ground several hundred yards distant and in an almost inaccessible spot. The stag arrived in due season and was safely laid under the hind seat of the wagon which was to carry us to the station shortly after midnight.

A late retirement was soon followed by an early breakfast. The night was moonless, and clouds intercepted any light which might have stolen through the deep darkness from the cold, distant, twinkling stars. The sure-footed horses were soon in their places and with all aboard, including the stag, we started, on a nine mile drive down to the depot. A small lantern was held over the dashboard to light us on our way, but it only served to make the darkness visible. The horses were depended upon to strike and follow the trail, but they failed, and we wandered around for some time before the fact was spoken that we were lost. At this trying moment the little lantern light flickered in the cool wind and went out in the darkness. By driving in a circle, as nearly as could be guessed, a trail was shortly struck, down which the hopeful horses quickly started. Certain stones, knolls, and sidling places were soon recognized as features in a wood-road leading to Contention, and—we were on the wrong track. It, however, lead into the right one and we turned about and began our journey toward Benson.

At one point a piece of the harness broke and some of the party were almost breathless while the repairs were being made. But we were on the right track, had passed the worst portion of the road, soon drove into the sleeping hamlet, and greatly to our joy found that the train was an hour late, but would be due in a few minutes.

OUTLINE AND PROGRAMS FOR THE C. L. S. C.

OUTLINE OF REQUIRED READINGS FOR MARCH.

First Week (ending March 8).

1. "Chemistry." Chapters XI.-XIV. inclusive.
2. "Zoölogy." Preface, Suggestions, Introduction, Pages 1-9 inclusive.
3. "Gossip About Greece." THE CHAUTAUQUAN.
4. "Alcibiades." THE CHAUTAUQUAN.
5. Sunday Reading for March 3. THE CHAUTAUQUAN.

Second Week (ending March 16).

1. "Chemistry." Chapter XV.
2. Zoölogy." Pages 10-34, to Mollusca.
3. "Color among Animals." THE CHAUTAUQUAN.
4. Sunday Reading for March 10. THE CHAUTAUQUAN.

Third Week (ending March 23).

1. "Chemistry." Chapter XVI.
2. "Zoölogy." Pages 34-49.
3. "Care of Criminals." THE CHAUTAUQUAN.
4. "Greek Art." THE CHAUTAUQUAN.
5. Sunday Reading for March 17. THE CHAUTAUQUAN.

Fourth Week (ending March 31).

1. "Chemistry." Chapters XVII., XVIII., XIX.

2. "Zoölogy." Pages 50-84.

3. "The Industrial and Social Effects of the Sewing-Machine." THE CHAUTAUQUAN.

4. "The Commercial Relations of American Countries." THE CHAUTAUQUAN.

5. Sunday Reading for March 24 and 31. THE CHAUTAUQUAN.

SUGGESTIVE PROGRAMS FOR LOCAL CIRCLE WORK.

FIRST WEEK IN MARCH.

1. Roll-Call—Let each member mention some one of the practical results of chemistry, embodied in the articles of general daily use, such as are found among toilet articles, wearing apparel, table service and provisions, house necessities and decorations, etc.
2. Table Talk—Current events.
3. A Preview of Zoölogy, setting forth the aim of the study and the plan pursued in the text. (Each lesson should be reviewed from the table in the back of the book showing the systematic arrangement of representative forms. It would be wise to appoint committees for collecting specimens for use in the study.)
4. The Lesson.

Music.

5. Paper—Foraminifera.
6. Paper—Sponges. (A separate evening given to the last two subjects, or to either one of them, for the purpose of examining specimens with a microscope would be found entertaining and profitable.)
7. Readings—"Sea Weed." *By Longfellow.* "The Coral Insect." *By Mrs. Sigourney.*
8. The Chautauquan Travelers' Club—conducted on the same plan as last month, and following Professor Mahaffy through Greece. In addition to this, trace the wanderings of Alcibiades as given in the article concerning him in the present issue. The guide will need to furnish extra maps for this exercise.

PRIESTLEY DAY.—MARCH 13.

"We spent [the hours] in search of deep philosophy."—*Cowley.*
 "Our stern alarms changed to merry meetings."—*Shakspeare.*

A CONVENTION OF SCIENTISTS.

Held in honor of Joseph Priestley; Sir Humphry Davy, President of the Royal Society of London, presiding. Famous persons present: Lavoisier, Cavendish, Franklin, Volta, Galvani, Black, Scheele, Van Marum (discoverer of ozone), Gahn, Bergman, Berzelius, Gay Lussac, Dalton, etc. All are to dress in the style of the time and the country to which they belong, and are to carry or to give some sign distinguishing their special work or character. For instance, Cavendish may appear as a bashful man; Van Marum as a man possessed of a keen sense of smell; Gahn and Bergman carry blow pipes; Scheele holds small phials of vinegar representing the acids he discovered, etc. The roll is to be called from the assumed names; after which the president (Davy) introduces Priestley, who gives his autobiography up to the time of leaving England for the United States; Franklin takes up the story at this point and completes it. The rest of the evening is to be devoted to repeating some of the experiments of these famous men. They must be conducted by a practical chemist; it would be well for the circle to meet in a laboratory. Experiments: 1. Priestley's method of preparing oxygen. 2. Lavoisier's proof that air is a mixture of two substances (see text-book, page 167). 3. The method of Cavendish for showing that water is a compound substance.

4. Some simple electrical experiments, ending with the decomposition of water by sending a current through it.
5. Davy's experiment which led to the discovery of potassium, (potash decomposed by electricity). If it is impossible from lack of a chemist and apparatus, to have the experiments, more attention may be given to the personal histories.

THIRD WEEK IN MARCH.

1. Roll-Call—Quotations about water.
2. Table Talk—News items.
3. The Lesson.
4. Paper—Corals.

Music.

5. Paper—Oysters: the oyster industry, and recent trouble with oystermen in Chesapeake Bay. (See article on "The Oyster Industry" in THE CHAUTAUQUAN for December 1887.)
6. Readings—The description of the "devil fish," in "Toilers of the Sea." *By Victor Hugo.* "The Mermaid." *By Tennyson.* "The Chambered Nautilus." *By Holmes.*
7. A Study of Shells. Have specimens brought in and set the circle to classifying them.
8. Debate—Resolved: That systematic labor should be introduced into the prisons of the United States for the benefit of criminals.

FOURTH WEEK IN MARCH.

1. Roll-Call—Quotations about insects.
2. Table Talk—Topics of the time.
3. The Lesson.
4. Paper—Ants. Bees. (One or both.)

Music.

5. Readings—Selection from the beginning of "The Cricket on the Hearth." *By Dickens.* "Bruce and the Spider." *By Bernard Barton.* "To the Humble-Bee." *By Emerson.*
6. Paper—Ship pests (barnacles and ship worms).
7. Selection—"The Song of the Shirt." *By Hood.* To be followed by an expression of opinion as to whether the sewing-machine has rendered such scenes less frequent.
8. Debate—Resolved: That a commercial union between the United States and Canada would be practical and profitable for both countries.

LOCAL CIRCLES.

C. L. S. C. MOTTOES.

"We Study the Word and the Works of God."—"Let us Keep our Heavenly Father in the Midst."—"Never be Discouraged."

C. L. S. C. MEMORIAL DAYS.

OPENING DAY—October 1.
 BRYANT DAY—November 3.
 SPECIAL SUNDAY—November, second Sunday.
 MILTON DAY—December 9.
 COLLEGE DAY—January, last Thursday.
 SPECIAL SUNDAY—February, second Sunday.
 FOUNDER'S DAY—February 23.
 LONGFELLOW DAY—February 27.
 PRIESTLEY DAY—March 13.
 FARADAY DAY—April 18.
 SHAKSPEARE DAY—April 23.

ADDISON DAY—May 1.
 SPECIAL SUNDAY—May, second Sunday.
 SPECIAL SUNDAY—July, second Sunday.
 INAUGURATION DAY—August, first Sunday after first Tuesday; anniversary of C. L. S. C. at Chautauqua.
 ST. PAUL'S DAY—August, second Saturday after first Tuesday; anniversary of the dedication of St. Paul's Grove at Chautauqua.
 RECOGNITION DAY—August, third Wednesday after the first Tuesday.

LOCAL STUDIES.

Through the courtesy of Lee E. Kirk, the secretary of the circle connected with the Twelfth Presbyterian Church of BALTIMORE, MD., reports from two most useful charities of that city are added to our *Local Studies*. The first is the Boy's

Home, the second, the Henry Watson Children's Aid Society.

The Boy's Home has just completed its twenty-first year, and stands foremost in the ranks of all charitable work in Baltimore. In it any boy between the ages of nine and eighteen, homeless

and friendless, can find home and friends if he will become an obedient member of the household, will work for his living at any occupation to which the superintendent may put him, and who will contribute out of his wages the following sums weekly: \$1.75 when wages are \$3.50 or less; \$2.00 when wages are over \$3.50 and not exceeding \$4.50; \$2.50 when wages are over \$4.50, toward the maintenance and support of the Home. The receipts during the last year from all sources were \$18,608.21, and expenditures were \$16,752.64. Included in the receipts were \$8,718.32 received from the boys themselves. At the close of the year there were 95 boys in the Home; 159 were entertained during the year; and 1,532 have been inmates from the beginning of the Home until the present time. All the boys admitted to the Home must be of good character and sound body and mind. When taken sick they are cared for by physicians gratuitously. A competent teacher gives them night instructions, and to cheer them as they go, a music class has been formed. Co-operating in behalf of the Home is a Ladies' Aid Society which re-furnished during the past year a dormitory. This work is saving young men from sin and crime, and rearing them to lives of industry and independence. The last General Assembly of Maryland appropriated \$1,000 per annum to the Home, and the City Council gives \$3,000 yearly.

The Henry Watson Children's Aid Society was chartered in 1860, and has four departments: The Children's; the Girls' Home; Sewing-Machine; and the Department for Instruction in Cutting and Fitting Garments. The Children's Department is intended for destitute children of all ages and sexes. They are taken and cared for until suitable homes can be found for them in the country, or they can be returned to their friends or placed in institutions. The last annual report stated there were three boys and one girl in this department. Eighteen boys and twenty girls had been placed in farmers' families as adopted children during the year. These children while in the care of the Society, and after being placed in a home, are sent to day and Sunday school.

The Girls' Home Department was organized in 1872 as a home for respectable working girls, unable to pay over two dollars a week for board, and for apprentices unable to pay anything. At the close of last year there were 10 inmates; the average in the Home during the year was 28. The Home is free from sectarian influence and unnecessary restraint, enabling the inmates to learn by experience as well as by precept what should constitute the practice and habits of every day life.

The Sewing-Machine Department was organized in 1871, and designed to instruct needy girls in the use of various machines used in factories and families. The total number receiving instructions during the past year was 241; daily attendance averaged 75.

The Department for Instruction in Cutting and Fitting Garments was organized in 1874, and the scholars are thoroughly instructed in all descriptions of dressmakers' and seamstresses' work. The number of scholars for the year was 155; lessons given, 9,052; daily attendance averaged 39; number of garments made, 4,547.

UNION WORK.

The first state convention of the Kansas Chautauqua Union was held in Topeka, December 27. Over two hundred Chautauquans were present. The first hour was spent in giving the "Chautauqua hand shake" and getting acquainted; then bountiful refreshments were served by the Topeka Chautauquans, after which the convention was called to order by Judge Nelson Case, the president elected at Ottawa last summer. Inspiring Chautauqua addresses were made by the president and others, among whom were Dr. Taylor, president of the Kansas State Normal, and Dr. Duncan Brown, president of Highland University. Mr. W. J. Wirt, of Parsons, president of the Third District, ad-

ressed the convention on the work done in his district; following this came very encouraging reports from the state president and secretary as to the work accomplished by the Union in the last six months. The old officers were re-elected, and after an interesting discussion of plans for work for the coming year, the convention adjourned. The next annual meeting will be held in Topeka.

Through the courtesy of Carlisle Circle of GREENVILLE, SOUTH CAROLINA, the Scribe is in receipt of a most interesting little book, the "Proceedings of the First Meeting of the State Chautauqua Convention of South Carolina." This convention convened last July at GREENVILLE in response to an invitation sent out by the Carlisle Circle to the various circles scattered through the state. There were present representatives from the Carlisle of GREENVILLE, the Evergreen of GREENVILLE, the Timrod of CHARLESTON, the Cherau, the Society-Hill, Anderson, and the Calhoun of PIEDMONT. Chautauquans unconnected with circles were present from five different points. A constitution was adopted declaring that the name of the union should be The State Chautauqua Convention, and its objects to unite the Chautauquans of the state and to propagate the Chautauqua movement in the state. Each circle is entitled to send two delegates, and each "lone" Chautauquan is allowed representation. Counselor Carlisle was elected president. After the transaction of the important business of organizing and adopting a constitution, much time was spent in discussing various important phases of work for the convention. The three days' session was closed by a delightful reception. The South Carolina Chautauquans have done well to thus crystallize their interests. The results of their efforts are certain to be considerable, and they will be awaited with interest.

The CINCINNATI Union of the circles of the city and vicinity held a reception on December 13. About three hundred persons were present representing twenty circles. The union is finely officered and a General Committee consisting of two members from each circle attends to the business. This committee provides many free lectures and arranges for lecture courses at moderate rates. A plan for obtaining prizes to be given for the best papers on assigned subjects will probably be perfected soon. The successful work of the Union made the December gathering most interesting. A literary program was presented, followed by a banquet at which wit and good-fellowship flowed freely. A new constitution was adopted at this meeting.

FOREIGN DEVELOPMENTS.

The first letter from the new circle in the mission station at PETCHABUREE, SIAM, reached THE CHAUTAUQUAN in January. Miss Small, the founder of the circle, rejoices in the companionship of two persons. The three deal in much pleasant anticipation of the benefit the readings are going to be to them. Something of the difficulty which readers in Siam have to meet will be understood when it is said that it takes two months for magazines, books, or notifications to reach them.—A new circle has been formed at KOPALA in the HAWAIIAN ISLANDS.—Miss M. E. Landfear, the Secretary of the C. I. S. C. in SOUTH AFRICA, has been carrying on for four years a patient, persistent effort to introduce and to foster Chautauqua work in that country. She is a teacher in the Huguenot Seminary at Wellington, Cape of Good Hope, and the time she gives to the C. I. S. C. must be taken from the leisure left after the performance of school duties. But with limited time and hindered by the great difficulty of communicating with headquarters Miss Landfear works quietly and steadily on and with results which justify the efforts she has made. In the four years

two hundred twenty-two persons have taken up the Chautauqua work in that country and all but about thirty of these are active members. Fourteen persons, certainly, possibly twenty, will graduate in July; arrangements have been made for an assembly and a real Chautauqua Recognition Service. A very encouraging feature of the work is the fact that several of the graduates have decided to read seal courses; the one chosen will be probably the Greek History and Literature as the undergraduates will be taking that; the work of '88 and '89 being done in South Africa in '89 and '90 on account of the difficulty of getting magazines and books promptly. It is hoped that some arrangement can be made by which Miss Landfear can give more of her time to the Chautauqua work. It is certain that if this were possible she could greatly increase the extent and value of the work.

NEW CIRCLES.

CANADA.—A C. L. S. C. student removing from Chicago to EAST HATLEY, has formed a circle of eighteen members in her new home. Under her efficient leadership and with the aid of books of reference purchased by the circle, the members are making rapid advancement.—In the circle of twelve in PARIS two hope to graduate this year. All take an active interest and the weekly meetings are thoroughly enjoyed.—There is a trial of the mettle of WINDSOR Circle, the studies having been begun two months after Opening Day; but all are determined to do the required work and to do it well.—A circle of seven members has formed in RALPHTON.—Twelve out of thirteen in the Athena of St. JOHN have determined to study for diplomas.

MAINE.—Forest City Circle of PORTLAND has increased its membership from eleven to seventeen since organizing.—The Learner's League meets weekly in CAMDEN. The plan of reading aloud some of the text-books, is followed. The eighteen members joined in the celebration of Homer Day.

NEW HAMPSHIRE.—The '92's predominate in the circle of thirty-three in TILTON. The circle's name is The Archers, and its motto, Aiming at Truth.—Eleven members form Granite Circle of BELMONT.—A pleasant circle of five is working in MEREDITH.

VERMONT.—“We meet once in two weeks and our membership increases at each meeting,” is the message from BARTON LANDING. This circle was formed through the efforts of a graduate of Plymouth Rock Class, and numbers several who had been studying alone. As eight people responded to the call for the first meeting, the name of Octagon was chosen for the circle. Its motto is, One to-day is worth two to-morrows.—A number of earnest students report from PROCTORSVILLE.—The Abenaki of BELLOWS FALLS has a promising outlook.

MASSACHUSETTS.—The Philomath, or Lover of Learning, Circle is a new organization enrolling thirteen names in CHELSEA.—A graduate of the Pansy Class is among the six members of the Hillside Circle of GROVELAND.—“Like the grand old mountain from which our circle is named, it has come to stay,” writes a member of the Mt. Tom Circle of HOLYOKE. Twenty members are enrolled, several of whom are taking post-graduate courses.—The Amphictyonic is a new circle in LAWRENCE.—BYFIELD, SHELDONVILLE, and WESTON report new organizations.—The inmates of WARNERVILLE Reformatory publish a paper, one department of which is devoted to reporting the meetings of the very successful C. L. S. C. to which many of the young men of the institution belong.

RHODE ISLAND.—The Enterprise is a new circle of PROVIDENCE, connected with the North Congregational Church.

CONNECTICUT.—From NEW HAVEN is reported a unique

organization of three members known as the Starr Circle, having for its president Frederick Starr, Registrar of the Chautauqua University; the other two members young men living in Cedar Rapids, Iowa, Prof. Starr's former home. The three expect to graduate together.—The students of MARLBORO and ROCKVILLE Circles are working for the White Seal.

NEW YORK.—A brilliant beginning was made by the circle at BERGEN, over thirty names being enrolled. A lady who had been studying alone for three years finds the circle very congenial and helpful.—Park Avenue Circle reported in our last issue among NEW YORK CITY circles, has increased its membership to fifty.—One year ago OSWEGO had no representative of the C. L. S. C.; now there are five flourishing circles in the city. The youngest is The Pathfinders, so named because the author of “Pathfinder” laid the scene of his story along the Oswego River, thereby giving the circle name a local signification aside from the pertinence of the word itself.—A circle in HOLLEY organized with thirteen members.—Enjoyable meetings are reported by the circle in PHOENIX.—The Alpha of GLOVERSVILLE is at work.—Members of the following circles are all '92's: BEDFORD, twelve members; AUBURN, Central Church, eleven; CORONA, thirteen; CANAJOHARIE, seventeen; HAMMONDSPOUT, twenty; LA FARGEVILLE, four; ROYALTON, eight; WEST WINFIELD, five.

NEW JERSEY.—The Peiffer Circle of JERSEY CITY, noticed last year, now meets with the Literary Society of Summit Avenue United Presbyterian Church.—The High School of PATERSON, has taken in several new members.—Four interested students form the Dauntless of NEW DUNHAM.—The Periclean of BRIDGETON has fourteen members.

PENNSYLVANIA.—Tunanquant, the Indian name for the creek flowing through the valley in which KENDALL is situated, is the name of Kendall's new circle of seven members.—Among the officers of WEST ELIZABETH Circle is regularly elected an editor for the circle paper.—Oxford of PHILADELPHIA organized with twelve members; Olive Branch of ESPYVILLE STATION, with fourteen; SUMMIT CITY has nine members, GARLOCK, eleven, RIXFORD, six.

IN THE SOUTH.—Nine new students form the Chesapeake of PERRYMAN, MARYLAND. The Eupatrid is added to the list of BALTIMORE's circles.—MANCHESTER, VIRGINIA, has a fine circle of twenty.—Weekly afternoon meetings are held by the five members in CULLOWHU, NORTH CAROLINA. The circle hopes to add to its numbers and is making good use of the educational circulars.—Members of the Magnolia of FLORENCE, SOUTH CAROLINA, are all White Seal students.—Two new circles of GEORGIA, are the Architects of ATLANTA, and the COLUMBUS.—A trio in LAKELAND, FLORIDA, are busily at work.—VERBENA, ALABAMA, has an excellent circle.—Membership in LAMPASAS, TEXAS, has increased to eighteen.

OHIO.—Bacon Circle of CLEVELAND arranged a program for New Year's Eve of sufficient length to occupy the attention until the time for “watching the Old Year out.” This circle has twenty-seven '92's with a graduate of '88 for president.—“We have excellent talent in our class, and are doing splendid work,” is the word from MONTPELIER.

ILLINOIS.—The Thoreau is a new circle in CHICAGO.—Noble Circle of PAXTON is named after the gentleman who organized it.—Interesting programs are rendered at the meetings of MORTON Circle.—Iota Nu has eleven members in MANTENO.—Other Illinois circles are at CRESTON, twenty members; NORMAL, twelve; RANSOM, seven; VIRGINIA, six; WELDON, four.

KENTUCKY.—A new circle was organized in January at COVINGTON, promising a large membership.

TENNESSEE.—The enthusiastic circle at CARTHAGE is doing double work to make up for two months lost; the members are eleven in number.

MICHIGAN.—If you find the class dull, blame yourself, is the motto of the Ajax, a flourishing circle in SHERWOOD. Judging from the report of delightful meetings, no one has yet had to blame himself.—Fifteen names on the membership roll was the result of an invitation extended to a few families in GRAND RAPIDS. Ramona is the circle's name.—The Athenian of ATHENS and Westminster of DETROIT have each seven members.—GAYLORD has a circle of three.

WISCONSIN.—The circle at DURAND is greatly encouraged by the increasing membership.—Four new names have been added at FORT ATKINSON, making the membership eleven.

MINNESOTA.—The Alpha of MINNEAPOLIS has held weekly meetings since its organization, with a short vacation for the Christmas holiday season.—ROCHESTER reports a circle of ten members; APPLETON, one of twenty-five.

IOWA.—The Vanarsdale of SIOUX CITY after six weeks of study has so increased its membership that a new circle will doubtless be formed. All the members are young men. Their enterprise is manifested by their having already engaged two lecturers to speak to them on subjects in line with the lessons, and the liberal sum of money spent by them for reference books.—Six ladies meet informally to study together one afternoon of each week in BURLINGTON.—Several graduates form the Garnet Seal Class of MANCHESTER.—Eight were initiated at DUBUQUE in November.—Five members of the Round Table meet weekly in VICTOR.

MISSOURI.—In KANSAS CITY five busy housekeepers and mothers meet weekly to review their studies, and find the hour spent together one of the pleasantest of the week. Four of their friends are meeting twice a week to overtake them in the course, after which the nine will unite in one circle to be known as the Pallas Athene. The Mary Gardiner Circle is another organization of five ladies in the same city.—From LEXINGTON a lady writes: "All last year I was the lone Chautauquan of this place, and engaged in my third year of study. I am fifty years old, so, of course, at first had some trouble in mind training, but by perseverance and frequent drills of memory, I am now as well able to study as a young girl at boarding school. I am anxious to 'grow old gracefully' and see no better way than in keeping my mind fresh. There is now a large local circle here which is a help and inspiration to me."—Reports of circles at work come from JASPER, eleven members; LEE'S SUMMIT, fifteen; SPRINGFIELD, Helen Circle, four; and STRAFFORD, five.

KANSAS.—The circle of '92's in KANSAS CITY is known by the former name of the city, Wyandotte.—Alpha of DOUGLASS reports "a growing enthusiasm for things Chautauquan." Alpha has fourteen members, one of whom was formerly a professor of Greek, and his varied information on Greece and the Greeks freely given to the class, is of particular value in this year's studies. The constitution admits local members on condition of their willingness to assist the regular members. The circle motto is, Knowledge unused is knowledge abused.—The following circles are in the midst of their first year of study: ABILENE, fourteen members; BURLINGAME, the Olympian; BUCKLIN, twelve; LYLE, eight; POMONA, Home Circle, ten; ROSEDALE, seventeen; ST. JOHN; and WINFIELD, seven.

NEBRASKA.—A circle at CAMP CLARKE is composed of the members of one family.—Six names were enrolled at the organization of *Utile dulce* in BARTLETT.—Seven in PONCA and the nine Vestas in KEARNEY are enthusiastically studying.

COLORADO.—Of the eleven circles of DENVER, three remain to be reported: the Eureka, the Rocky Mountain, and the Alpha.—Interesting meetings and regular attendance are reported from the circle at MONTE VISTA, of four members; LAS ANIMAS, six; GEORGETOWN, eleven; BRECKENRIDGE, twelve.

DAKOTA.—ST. THOMAS sends thirteen recruits to the C. I. S. C. ranks.

WASHINGTON TERRITORY.—A member of '90 moving from Michigan to the mining camp of BLACK DIAMOND, has formed there a circle of eight.—A large circle began work with the New Year in LA CAMAS.—An interested circle of twenty-four meets regularly in VANCOUVER.—The '92's in ABERDEEN are thirty in number.

CALIFORNIA.—Vincent and Argo are new circles of SACRAMENTO.—All are White Seal aspirants in the Yucca of SOUTH PASADENA, and the EMMET Circle.—The Pacific Coast list is lengthened by circles at COLTON, STOCKTON, SANTA CLARA, COVELO, and the Fidelis of SAN FRANCISCO.

NEWS FROM REORGANIZED CIRCLES.

CANADA.—The Berkeley Circle of TORONTO has had a large map of Greece in its possession while reading Grecian history and has learned what cannot be learned too soon, that maps are an essential in a student's outfit. The Berkeley issues a circle paper in which some topic connected with the readings is the leading feature. The members send to the editor all items bearing on this subject.—All the graduates of '88 keep their connection with the Pleasant Hour of BRANTFORD. Under the stimulus of this noble example the circle has increased its membership one third with full fledged '92's. The Pleasant Hour has re-arranged the readings so as to extend Greek History and Literature throughout the year, and to bring the other studies forward. The plan is succeeding in the circle.—The Ahmeeks of OTTAWA, introduced last month, publish a monthly paper called *The Sheaf*.—The application for blanks announced in December as coming from MONTREAL has borne excellent fruit, a fine and active circle. The first of January was the occasion for a very happy social gathering in the circle.

MAINE.—The present is the fifth year of work in the North Star of GREENVILLE.—Several programs from the Papyrus of CUMBERLAND MILLS have reached us. The *Pronunciation Tests*, the sets of questions on Greece from the *Table*, map exercises, and character sketches form prominent numbers on the program.—The library which the Skidompha Club of DAMARISCOTTA is collecting, has reached 205 volumes. A proud circle ought the Skidompha to be.—Norombega Circle of BANGOR is in its fourth year, twenty-seven strong, and studying faithfully. The evenings spent with Pericles and Demosthenes have been particularly bright events of the winter.

NEW HAMPSHIRE.—COLEBROOK has a circle of eleven members, including one graduate.—Winchell Circle of DERRY is at work.—Sickness among members is a serious circle discouragement and Ponemah of GREAT FALLS suffered considerably from it last year. It endured the break, however, and has collected its forces again, declaring that "this year's work shall prove a success." And there is no danger but it will with that spirit.—The Crescent of WEST SWANZEY has a roll fifteen names long.—A

"flourishing condition" is the announcement from SEABROOK. Several new members have entered the circle this year.

VERMONT.—The Athenian Circle of ENOSBURGH has been in ranks since last October. The attendance is said to be larger than ever and the meetings full of interest.—Per Gradus of WINDSOR has an attendance of twenty-nine.

MASSACHUSETTS.—The Bates of BOSTON has among its members a missionary in Central Africa. The circle sent the books and THE CHAUTAUQUAN to her this year.—

Congratulations are due the WEST BERLIN Circle on its revival after the lapse of a year. The reorganization has been made with much spirit. Berlin ought to have a fine class surely, for it has graduates in its midst from every class save '83.—

The circle at BARRE is the work of three wide-awake Pansies. Its third year is proving its best, we judge, for, says a correspondent, "We have a more ardent love for Chautauqua than ever, a quickened desire to dive below the surface, and a more earnest reaching after the things beyond."—

The Rainbow of WEST ACTON is a White Seal Circle, every member demanding the memorandum for that grade of work. That fact is all that it is necessary to give about the Rainbow to prove its good quality.—

The Apponeganets of SOUTH DARTMOUTH meet every week, but alternate the work, one week presenting a literary program, the next reviewing the fortnight's lesson.—

A Corrector and Recorder of all Forms of Extravagant Expressions is an officer in the Vedic of FREETOWN. A cent for every three offenses is the very moderate fine imposed.—

A "cosy circle" and "pleasant meetings" are reported from LONG PLAIN.—

The Psyche of MEDWAY keeps its former officers and membership.—

At PEABODY, SOUTH YARMOUTH, and WHITINSVILLE, circles are in operation with memberships of twenty-three, four, and thirteen, respectively.

RHODE ISLAND.—The Fort Hill Delvers of PROVIDENCE have determined to observe the Special Sundays.—

At WARREN the Delta has a membership of about thirty. The circle graduated nine '88's last year and all of them have rejoined the circle as regular members, taking seal courses.

CONNECTICUT.—The Halloween of CHESHIRE has thirty-five members enrolled.

NEW YORK.—An entertainment for the benefit of the CLIFTON Circle was held in February and the hand-bills show a very happy program. A debate was introduced, "Resolved that marriage is not a failure," with a happily married man to take care of the affirmative, and a contented young bachelor to plead for the negative. An excellent number in harmony with the two lines of Required Readings, the Greeks and the Great Inventions, was a paper on "What Modern Inventions were the Greeks Deprived Of?"—

In JOHNSTOWN the Athenians tried a change in meeting-place this winter, exchanging the parlors of members for a Y. M. C. A. Hall. They were not pleased with the experiment and went back to the more familiar homes.—

The circle in Trinity Church, ALBANY, is "holding its own."—

Twenty-four is the number of Philomatheans at BELLEVILLE. Lively interest has been a characteristic of this circle since its founding in '89. Several of its members expect to graduate this year.—

Here is a report to be read and digested by failing and faltering circle-members. It comes from CHARLTON:

"We almost believe that our circle equals that ideal one of Pansy's 'Hall in the Grove.' Our members are very regular in attendance, always well read up, and as for the trouble of getting them to talk, it was thought at one time there would have to be a rule that but one might talk at a time, but finally it was decided to let well enough alone. One of the reasons we have

such a pleasant circle is that each member enters heartily into the work and there seems to be a tacit understanding that each accept the part assigned and do the best he can."

—The Sunrise at Mt. LEBANON announces itself as "still up to see the sunrise."—From the stream which flows through PHILMONT, the Acawaumac, the circle there takes its name. The town supports one thousand factory operatives and it is the aim of the founders of the circle to bring as many as possible of them into its ranks. The effort is meeting with success, some twelve young men having entered the circle.—

Good news this is from RODMAN, "Our circle has doubled its list, this, its second year."—

At SALAMANCA a lecture course has been arranged by the circle. Col. Copeland, Jahu De Witt Miller, and Robert Nourse are in the list.—

The secretary at WATERVALE writes, "We have doubled our circle in two years. I predict another double before the '90's graduate."—

A new name has been taken by the circle in ROCHESTER, known as the Hedding; it is the Riverside now.—

The De Kalb of BROOKLYN has twenty-five members.—

Twenty-one persons form the Walker Circle at CANASERAGA this year; four the HOMER Circle.

NEW JERSEY.—Cheering, this from CAMDEN: "We have thirty-six members on our roll and our average attendance is double that of last year."

PENNSYLVANIA.—The Plato Symposium was undertaken by the Pollock Circle of ALLENTOWN. A local paper says of the entertainment:

"If an Athenian citizen of twenty-three centuries ago could have been present, he would have felt that he was once more in his home land, surrounded by the society of the city which to him and to the world is the synonym of all that is superior in art, culture, and education; he would have found himself in a brilliant company of Greeks who had gathered for feasting mind as well as body. On entering the banquet hall we were greeted by the host, who showed us our place among the invited guests. In the room were tables around which were arranged couches. Soon the Athenian ladies and gentlemen entered the room attired in the costumes of their native land. The attire of the ladies was especially noticeable, for the robe clasped at the shoulder, the girdle at the waist, the Psyche knot and the bands about the hair, set off woman's beauty as no other style can. The time for the banquet having arrived, perfumed water was passed around for the hands. This was followed by bread in baskets, together with sweetmeats, dates, and figs, lemonade came next, and again the perfumed water. Roses were then distributed. The dinner past, the company turned to the intellectual feast. The Life of Plato, His Philosophy, Thoughts on Plato, and the Ideal Republic were discussed. Music and conundrums followed."

—The PHILADELPHIA Circles are in an unusually healthy condition. No small portion of the interest in the city is due, it is plain, to the praiseworthy efforts of the Chautauqua Union. The Franklin Circle, a member of the Union, has now reached the good round number of forty-seven, a dozen of which are teachers. A circle journal is a pleasant feature of their work. Jefferson Circle has been sifted thoroughly in its course and now includes none but hard workers. Their fourth year they are trying to make the most profitable. How about making a seal circle of the Jefferson? Agenda—things to be done—is the name of another Philadelphia circle. The motto is significant, "Learning without thought, is labor lost." Simpson reports itself much encouraged by the circle's growth this year.—

The Anemone Circle of BUFFALO and KELLY TOWNSHIPS, Union County, has twenty members. The exercises which make up their programs are varied and full, including regularly, devotional exercises, answers to roll-

call, the *Questions and Answers*, and literary programs. A reporter and a critic are officers and the circle is divided into two parts, each doing some interesting reading outside of the Required Readings.—The MUNCY Circle is four years old.—Learning that Bishop Vincent was to lecture in SCRANTON, January 3, for the benefit of the Home for the Friendless, the four circles of the city resolved to tender him a reception. After the lecture the Chancellor was escorted to the Westminster, near the Academy of Music, where the President of the Vincent Circle in a few brief words welcomed Bishop Vincent on behalf of the members of the Vincent, Cora A. Howe, Anthracite, and Hellenic Circles. The Bishop replied to the welcome in fitting terms, and called on Dr. Duncan, of Syracuse, who was present, to respond for him. The party numbering eighty Chautauquans then adjourned to the dining-room for refreshments, which were followed by several brief speeches. The exercises were enjoyable throughout and afforded a pleasant way for the circles to show the estimation in which Bishop Vincent is regarded here. It is extremely probable that the outcome of his visit will be the formation of a local assembly and the starting of a number of new circles.—The six Marthas at BEAVER find this year's course intensely interesting, they say.—The new circle at MILLERSBURG, reported in January, is to be known as the *Æolian*. Fifteen '92's "delighted with the course," form the circle.—A hint from the SHARPSVILLE Circle: "The older members are faithful in their attendance, helping and encouraging the younger ones."—Prosperous organizations are holding meetings at TUNKHANNOCK (eleven members), WILLIAMSPORT (twelve), CANTON (twenty-two), and BUTLER (the Bryant of twelve members).

SOUTHERN CIRCLES.—The Madison, of BALTIMORE, MARYLAND, has several encouraging things to tell: it is up with the readings; several graduates of Johns Hopkins have promised to talk to them, and Dr. Adams of this University has promised to lecture to them when the Hellenics are completed. This lecture, it is hoped, will be the occasion for a reunion of the Baltimore Chautauquans. Another circle of the city, composed largely of business people, is reading under the disadvantage of limited and interrupted time. The circle is obliged to take a year and a half to the work laid out for a year. It is the *doing* of the work, not the time in which it is done, which is the important thing.—At BUCKHANNON, WEST VIRGINIA, there is a club of fifteen "greatly enjoying the course."—The circle at CHERAW, SOUTH CAROLINA, is in its third year and numbers thirty-eight.—SANFORD, FLORIDA, has been a neighborhood to the yellow fever, though spared its ravages. The circle, with all other interests, has suffered from the consequent demoralization. The class is re-forming, however, and all Chautauquans will join our hearty wish that Sanford may be spared another such a reign of terror.—The *workers* all remain in the circle at AUSTIN, TEXAS.

OHIO.—The Ninth St. Baptist Church Circle of CINCINNATI has a membership of twenty-one.—The club at CLARIDON is progressing.—From HOCKINGPORT, the secretary writes that the circle is working with great vigor and enthusiasm and thinks the readings delightful.—There are sixteen shoots on the Mistletoe branch of MECHANICSBURG, "diligently studying the Greeks."—"As enthusiastic this year as three years ago," is the word from the twelve members at MINERAL RIDGE.—Bishop Vincent was at NEW LISBON not long ago and the circle there did themselves the honor of tendering him a reception. A correspondent declares that on the occasion the "circle was quite dizzy with happiness."—Ten persons form an interesting club at

WINDHAM.—Mr. George Vincent lectured at WADSWORTH in the fall and the interest he aroused in the C. L. S. C. resulted in a considerable addition to the circle.—The Periclean of BERLIN HEIGHTS was reorganized in October with fourteen members.—The following list of Buckeye reorganizations have reached the Scribe's table: XENIA, the Home; TIPPECANOE CITY, eleven members; PERRYSBURGH; LONDON, the Irving; DELPHOS; NEELYSVILLE, four members; FREDERICKTOWN, five.

INDIANA.—Homer Day was celebrated at NEW ALBANY by the Lowell Circle which invited the Pioneer to share its festivities. A delightful evening was spent and at the close of the program a lively discussion on pronunciation and spelling was carried on.—Several capital things have been learned by the CROWN POINT Circle: "to be prompt in recitation, to attend strictly to business, and not to spend time in mere talk." The circle has instituted a monthly banquet at which the simplest refreshments are served. Each member invites a friend; the lesson is shortened and an hour devoted to games. The evening is becoming a feature in the social life of the town.—RUSHVILLE's Circle is in its ninth year.—The class at PORTLAND has twenty-three members.—The Vincent of ELKHART has reorganized.

ILLINOIS.—Bryant of CHICAGO opened the term with twenty-seven members. Weekly meetings have been kept up since, relieved by two receptions. The attachment to the work grows with the members.—Belden Ave. Circle of the same city has thirty members, most of whom have labored together for two years.—There has been a large influx of new material into the circle in OAKLAND M. E. Church in CHICAGO.—A company of Methodists in MONMOUTH under the title of Wesleyana is doing circle work. They are pleased and benefited by their readings, they say.—Fourteen persons are in the FLORA Circle.—The Laurel of PECATONICA has nine members.—Forty persons are on the PRINCETON roll.—The fourteen members of the Qui Vive of PITTSFIELD are hard workers but they appreciate a frolic, and a rare one they had in December, something quite new in Local Circle annals, nothing else than an "apple-butter boiling." Hearing that a member in the country was to make her apple-butter on a certain day, the circle surprised her no less by its appearance than its usefulness, for the members pared and quartered and stirred until the work was complete. The meeting was voted by the circle one of the pleasantest, by the hostess one of the most profitable, they have held.—The STREATOR Circle has thirty-one members.—The second year's work is being carried on by the Alpha of SAVANNA.—There is an enrollment of nineteen in the Mars of WOODLAWN PARK and an interesting enthusiastic company they make. The programs are prepared from the *Suggestive Programs* of the magazine and the lesson is handled by a recitation of the *Questions and Answers* and by discussions. A weekly Quiz Class for extra reading thrives in connection with the circle.—Ten names are on the roll of the Ouilmette Circle at WILMETTE.—The Helpers of ROCK ISLAND are clamoring for the twelve page memoranda. Evidently they believe in being self-helpers.—Seventeen names are reported from ALEDO as forming a club.

KENTUCKY.—In the January issue of THE CHAUTAUQUAN it was stated that the South Side Circle of HOPKINSVILLE was uniting with a society of the town in carrying out a lecture course. It seems that this society is none less than one of our own, the Robert Burns Wilson Circle, from which our readers will remember we have had several pleasant notices in former years.—The circle at LEBANON is progressing finely.—GREENVILLE Circle is made up of fourteen per-

sons.——ASHLAND Circle continues to "hold its own," indeed has made an advance in its membership and its work, the list being increased by several new names and the work by devoting a number on each week's program to Shakespeare.

MICHIGAN.—At DETROIT a circle of twenty-two has adopted the name Hurst.——The Arnold Memorial Circle of DETROIT has fifteen members.——Budiek, an Indian name for home, has been chosen by the twenty-two members at HARBOR SPRINGS as their name. At the Christmas celebration of this circle each member came prepared with a pretty card to be given to his left-hand table companion as a souvenir of the occasion.——Nineteen names are enrolled in the Pere Marquette Circle at LUDINGTON.——The readers in the ALPENA Circle "prefer the twelve-page memoranda."——The Beacon Lights of CAPAC are nine in all, enough to save the community if they shine as they might.——Ten new members have put fresh life into the Center of MONROE.——The Gitche Gumee of HANCOCK is twenty-seven strong.

WISCONSIN.—Many of the members of the Monona Lake Circle of MADISON had their four-page memoranda filled out at the beginning of 1889.——Eighteen members and reinforcements looked for, are reported from Conference Circle of BLACK RIVER FALLS.——"We are twenty-three," says the secretary at BELOIT.——The BRODHEAD Circle organized in '87 is going through '88-'89 with nineteen members.——The readers at GRAND RAPIDS divide themselves into two divisions, an afternoon class for graduates and ladies who prefer a day meeting, and a second division for those to whom the evening is more convenient.——PHILLIPS Circle is doing honest work.

MINNESOTA.—MINNEAPOLIS circles reporting this month are the Minnehaha of ten members, the Alden of four, and the Itasca. Of the last the secretary writes, "We are doing excellent work. The attendance has been very gratifying and the studies are pursued zealously."——The eight members at WELLS find the readings "hard but interesting."

IOWA.—The Madison Street Circle of LE MARS is doing the most thorough work that it has done since it was organized. The rules allow no indifferently prepared lessons, and in the literary exercise more attention is being paid to elocution. In addition to the usual lesson the members are expected to be able to answer questions on the Required Readings in THE CHAUTAUQUAN. Just now they are enjoying descriptions of noted persons and places in Europe, charmingly given by one of their number who spent last year traveling there.——A class of eighteen at STUART spend several hours each week in discussing the readings and find the time spent most profitably.——The circle at PELLA has had new life infused into its veins this term, largely through the energy and ability of its president. The circle has decided to hold open meetings once each month, to which all interested in literary and scientific work are invited.——The great difficulty the GLENWOOD Circle encounters is lack of time at its gatherings to do the work as thoroughly as it desires. So much animation and freedom characterize the meetings that the time to adjourn comes too soon. This "greatest difficulty" is really the greatest of merits.——At MONTEZUMA and BLUE GRASS the circles have reorganized, the first with eight members, the second with ten.——The president of the C. L. S. C. Alumni Association of MANCHESTER, gave to the resident graduates in August last a literary tea. Five new members were taken into the association, making in all twenty-three. The program consisted of an address of welcome, responses, and D-mar

prepared essays. The hostess then led the way to the dining room, where she bade her guests

"Feast with the best, and welcome to my house;
My banquet is to close our stomachs up,
After our great, good cheer. Pray you sit down;
For now we sit to chat, as well as eat."

Each member responded with an appropriate quotation. A social hour followed the banquet.

MISSOURI.—The SAINT LOUIS Chautauqua Union celebrated Milton Day with a program on which seven circles were represented, the Fireside, Lafayette, Harmony, Union, Graduate, Vincent, and Kimball.——The Hawthornes of SEDALIA have been working with zeal through the winter, and are expecting new recruits to swell their number.——"Wide-awake, enthusiastic, and progressive as well as talented," is each of the thirteen members of the Irving of LOUISIANA reported to be, and in consequence the circle is thrilling with Chautauqua spirit and radiant with Chautauqua joy.——The circle at CLARKSVILLE boasts fifteen energetic members. Four '87's continue the readings, some of whom have five seals which they consider only a beginning. Three '92's have been added this year.——Mary De La Verge Circle of CLINTON has its full complement of members—twenty-five. With two exceptions they are busy wives and mothers, but they manage to find time to do the work and usually to do it well. They always have full and interesting meetings, and during the five years of the circle's life there has never been a refusal on the part of any member to do work assigned. It has passed into a proverb at Clinton that "nothing ever keeps the Mary De La Verge Circle from meeting and the ladies always have a good time." The Alpha, a second circle of the town, is composed of eighteen young ladies, and a third circle admits both ladies and gentlemen.——Greek History and Literature are proving popular with the seventeen members of the Bryant at WARRENSBURG. There is another circle in town, the Stone, and several readers connected with no circle.

KANSAS.—The Historic City Circle, LAWRENCE, has a membership of twenty-five. About half belong to the class of '89. Six have joined the circle this year. They are doing thorough work under the very efficient leadership of a graduate of the Class of '82. Most of the Memorial Days are observed, always with pleasure and profit. The enthusiasm grows each year. Almost the entire membership fill out the White Seal Memoranda, and a number of the Class of '89 will read the Garnet Seal course.——An enthusiastic class of seven flourishes in LAWRENCE, their name, Kanwaka. Progress and enthusiasm are their watchwords.——Fourteen members are in the circle at CHEROKEE.——The Chautauqua wave is swelling in WINFIELD. The circle started last year, began this with twenty-one members of whom four are graduates reading for seals. Faithful and persistent work is doing. A circle of ladies meets in the afternoons and there are many readers unconnected with the circles.——The Mary A. Lathbury of SEDAN has the pleasure of being located in Chautauqua County. In 1875 Howard County was divided and the southern half through the influence of the member of the legislature from that district, a native of Chautauqua County, New York, was given the name it now bears. Sedan Chautauquans are very proud of the county name, as may be imagined. The circle is a most vigorous body of ten members, two of whom are seal-seeking Pansies.——The Clio of WAMEGO is full of life and ambition this term. The lessons are done promptly and many pleasant features are introduced to enliven the routine work. A regular number on last year's programs was the reading of quotations from American authors. They were

written out on cards which frequently were very artistically decorated. The person fortunate enough to locate the quotation received the card. A Grecian party was one of the latest extras of the Clio. Among the distinguished guests present in full classic costume were Penelope with her slave Gorgo, Sappho with slaves Alcmena and Gyges, the daughter of Pindar and slave Niobe, Xanthippe and her son, Xanthus with slaves Eunoe and Egina, and the daughter of Aristides with Corena as slave. The ladies when introduced each gave a bit of personal history. A march of the slaves followed, each telling her story, one in Greek, "being unable to learn English," so the Wamego papers said. A Grecian banquet, followed by riddle guessing, finished the entertainment.

OTHER WESTERN CIRCLES.—The third year in the Cactus Circle of ALAMOSA, COLORADO, is proving successful.——RAPID CITY, DAKOTA, Circle is at work.——The circle at ALEXANDRIA, DAKOTA, is prospering.——This is the way a

zealous member saved the Spiral of SAN FRANCISCO, CALIFORNIA, from an untimely end: "When the circle of which I am a member held its first meeting this year, there seemed to be so very few members that they talked of disbanding; and the meeting was adjourned for one week. After thinking the matter over I concluded to read again, and I immediately went to work to increase our numbers. By the next meeting I had six new members. This so encouraged the locals that they became regulars and the circle reorganized with sixteen enthusiastic earnest workers."——The membership of the Houghton of OAKLAND, CALIFORNIA, is thirty-nine, and each evening brings a new face. The club has representatives from each class from '86 to '92. Patience and Perseverance are the guarding angels of the club.——When the Mt. Whitney of SELMA, CALIFORNIA, reorganized, it was with a roll twenty-seven names long.——At LOS ANGELES, CALIFORNIA, the Hill Top Circle has seven members.

THE C. L. S. C. CLASSES.

CLASS OF 1889.—"THE ARGONAUTS."

"Knowledge unused for the good of others is more vain than unused gold."

OFFICERS.

President—The Rev. C. C. Creegan, D.D., Congregational House, 1 Somerset Street, Boston, Mass.

Vice-Presidents—The Rev. S. Mills Day, Honeoye, N. Y.; the Rev. J. H. McKee, Little Valley, N. Y.; the Rev. I. D. Steele, Jackson, Tenn.; Miss Genevieve M. Walton, Ypsilanti, Mich.; Mrs. Jennie R. Hawes, Mendota, Ill.; Mrs. J. A. Helmrich, Canton, Ohio; Miss Ella Smith, Meriden, Conn.; Miss Mary Clenahan, Cedar Rapids, Iowa; G. A. Brashear, Pittsburg, Pa.; the Rev. S. H. Day, Bristol, R. I.

Treasurer—The Rev. R. H. Bosworth, 230 Rodney Street, Brooklyn, N. Y.

Recording Secretary—Mrs. E. N. Lockwood, Ripon, Wis.

Corresponding Secretary—The Rev. H. C. Jennings, St. Paul, Minn.

CLASS FLOWER—THE DAISY.

Five months of thirty days each is equal to one hundred fifty days. Six pages a day thoughtfully read means nine hundred by August first. Let '89's who are behind do a little careful figuring and then plan accordingly. It will save us many laggards. We must have more than four thousand graduates if we would "hold our own."

A member of '89 lately established as a missionary in Queen Charlotte's Island, and we believe the first Chautauquan who has ever reported from that island, writes: "I am very anxious to be among the graduates of '89, and write you early that I may have all done in time, we are so far removed from regular mails. Though I read alone it is an inspiration to belong to the great band of C. L. S. C. readers. I thoroughly enjoy the work and have been very much benefited by the regular course of study. My books are my companions in the isolation of the mission field."

'89's who are willing to assist during the year in preparing and gathering materials for the August decorations in the Amphitheater and for the Class Building at Chautauqua should address Mrs. E. N. Lockwood, Ripon, Wis., Rec. Sec'y, Class '89, and Secretary of Decorative Committee.

Messrs. Snow and Greener, of Rochester, N. Y., have designed and are making a very beautiful class banner. This was promised to the class some time ago, but for various reasons it was thought best to have it christened on Recognition Day, 1889. The gathering of the various class banners at Chautauqua on Recognition Day is one of the prettiest sights of the day.

CLASS OF 1890.—"THE PIERIANS."

"Redeeming the Time."

OFFICERS.

President—The Rev. D. A. McClenahan, Allegheny, Pa.

Vice-Presidents—John Lee Draper, Providence, R. I.; the Rev. Leroy Stevens, Mount Pleasant, Pa.; Charles E. Weller, St. Louis, Mo.; Mrs. Dr. Edwards, Randolph, N. Y.; Miss Anna L. Sanderson, Toronto, Canada; George H. Iott, Chicago, Ill.; A. T. Freye, Crestline, Ohio; Miss Helen Chenault, Ft. Scott, Kan.; S. M. Delano, New Orleans, La.; Miss Sarah Young, Danville, Ky.

Eastern Secretary—Miss G. L. Chamberlain, Plainfield, N. J.

Western Secretary—The Rev. H. B. Waterman, Griggsville, Ill.

Treasurer—Mrs. E. P. Wood, 252 General Taylor Street, New Orleans, La.

Items for this column should be sent to Miss G. L. Chamberlain, Plainfield, N. J.

CLASS FLOWER—THE TUBEROSE.

A Pennsylvania '90 sends to the class secretary, five dollars for the Class Building, and inquires if the new building is to be ready this year. It is for the '90's to say. Shall all the other classes do their part and '90 alone stand before unreared walls? Twenty-five cents from every member means the Class Building.

If every '90 could give as good testimony as the following, there would be no thinning of ranks to mourn when the final records of the class are made up: "I have been on the verge of giving up many times on account of sickness, moving, and the many things that a mother and housekeeper has to confront her. I am the only one of our circle of six who has filled out the memoranda or done the Required Reading, and I have done so only by a determination that I would not give it up. I feel that I have been benefited greatly. I have read most of the books twice."

A '90 in Shahjehanpore, India, writes: "We have begun our third year and find it very interesting; several of our members have dropped out, but there are enough of us left to form a circle. We are such an intensely busy people that often books get crowded out. This C. L. S. C. keeps us from being too much 'people of one idea.' As usual I would like the White Seal memoranda."

Here is pointed testimony from a classmate who lives on a farm of three hundred acres and has much to do and very little help. She writes, "I wanted to take up the C. L. S. C. course two years before I did but thought I would wait till I could have more time. I gave up waiting for time and just took it and find myself saying very often, 'How much people can do if they only try.'"

CLASS OF 1891.—"THE OLYMPIANS."

"So run that ye may obtain."

OFFICERS.

President—The Rev. J. M. Durrell, D.D., Lawrence, Mass.*Vice-Presidents*—Mrs. Mary A. Livermore, Melrose, Mass.; Mrs. Mary T. Lathrap, Jackson, Mich.; the Rev. J. A. Smith, Johnsonburgh, N. Y.; W. H. Westcott, Holley, N. Y.; Chas. E. Colston, Hannibal, Mo.; Rev. J. S. Ostrander, D.D., 314 President Street, Brooklyn, N. Y.*Secretary*—J. A. Reinhart, Ph.D., Paterson, N. J.*Assistant Secretary*—Mrs. Harriet A. H. Wilkie, Onondaga Valley, N. Y.*Treasurer*—Mrs. Theodosia M. Foster, Verona, N. Y.

CLASS FLOWER—THE LAUREL AND WHITE ROSE.

THE PRESIDENT'S CHAT.—How shall the circle be kept together? The roll-call discloses a large number of absentees. "What is the matter?" the president asks. "What kind of a program can be arranged," says the committee, "that will hold the members together?" An enterprising president said to me at the beginning of the year, "When our numbers are reduced about one half, we shall have a good working circle." The reading months are half gone and those who attend now are, as she said, "working." In a circle composed entirely of faithful Chautauquans, providing an interesting program becomes a simple matter. If twenty persons read for a week the same subject, receiving inspiration from the same source, they cannot fail to be interested in reviewing their work, comparing impressions, listening to more detailed accounts of some topic in the week's reading. A class in school never finds the recitation of a well learned lesson dull. An ideal Chautauqua Circle will not find the entertainment dull that is made up of the review of thorough work. Those who do their reading in a superficial manner and have only a vague idea of the subject under discussion will find it difficult to be interested in any program, and soon drop out. Others from lack of confidence are unwilling to do their share of work, and if assigned a part, respond "unprepared," or absent themselves.

A satisfactory program depends upon the qualifications of the circle more than upon the skill of the committee. The plan laid down each week in THE CHAUTAUQUAN is arranged with much care and serves well for a guide. It presents a wide range of subjects and abundant opportunity to fill in with matter of local interest to all readers. To such as desire a thorough knowledge of the subjects read and are willing to do their part, there will be no lack of interest. To those who are reading to remember, and studying for valuable information, the reviews will be profitable, the essays instructive, and the quizzes will give definiteness to facts and render one ready in bringing to the mind and the tongue ideas that are lying dormant. So if you do not find your circle attractive, do a little more thoroughly and promptly the required reading at home and come into the meeting determined to do your part. If you undertook the course, not realizing how much work it would necessitate, look at the profit you are to derive and struggle through the task and take pleasure the rest of your life in what you have accomplished. "All at it and always at it," will solve the difficulty of any dwindling circle.

A Canadian '91 who is full of zeal for the cause writes, "No one could dream what a comfort this course has been to me. I am one of those who never will be well again and so I cannot go into active society. My husband's business keeps him always from home. He is particularly interested in my books, and when he comes we all treat him to an airing of our knowledge, and the children tell about the Spartans and Athenians as if they knew everything that was to be known. Our class has arranged to have some of the members write bright little sketches for the local papers and try thus to let the light of Chautauqua shine."

CLASS OF 1892.—"THE COLUMBIA."

"Seek and ye shall obtain."

OFFICERS.

President—Col. Logan H. Roots, Little Rock, Ark.*First Vice-President*—Prof. Lewis Stuart, Mich.*Second Vice-President*—F. W. Gunsaulus, Ill.*District Vice-Presidents*—Mrs. Frank Beard, N. Y.; Dr. P. S. Henson, Ill.; Charles P. Williamson, Ky.; Issa Tanimura, Japan.*Treasurer and Member Building Committee*—Lewis E. Snow, Mo.*Secretary*—Miss Jane P. Allen, University of North Dakota, Dak.

CLASS FLOWER—CARNATION.

More than three hundred '92's from the Pacific Coast have been reported through the secretary, Mrs. Field. This is a considerable gain over the number of new members reported last year. The '92's ought to be well represented at the Pacific Assemblies this year.

Several '92's are reported from an Institute for the Deaf in Pennsylvania, and their leader writes, "The course of reading has been a real benefit to me. Not because it brings me back to my college studies and college days, but because it keeps my mind well disciplined."

The "Foreign Branch" of '90 is represented this month by several names from South Africa, four from Iquique, Chili, and one from Mexico.

A housewife from Indiana writes, "With a family of three children of my own and a motherless child whom we have taken into our home, the thought of reading the Chautauqua course this winter was naturally a very weighty one. I finally decided to try, sent for my books and THE CHAUTAUQUAN. I have caught up with the Required Readings and have kept up my household duties if not better, certainly as well as before, and with a lighter heart and a definite purpose in view never before felt by me."

A classmate from New York City writes, "I received last evening the envelope containing those precious papers, and you cannot imagine the delight I felt as I read them over and over again and realized that I was really a Chautauquan. Please send me a twelve-page memoranda. Although I do not 'despise the day of small things,' yet four pages of questions do not half satisfy me."

GRADUATE CLASSES.

The Annual Alumni banquet of the New England Chautauquans was given at the New England Conservatory of Music, Boston, January 26. A reception was given to Bishop Vincent. Addresses were made by Bishop Vincent, J. W. Hamilton, D. D., of Boston, and C. C. Creagan, D. D., President of the Class of '89. About three hundred persons were present. It was a decided success.

The coming summer at Chautauqua promises some good things for the Pioneers, and every one is urged to make an extra effort to be there and enjoy them. Like true Pioneers they have "opened a way in the wilderness," and are sharpening their hatchets with enthusiasm that they may blaze the way "From height to height." The lease of the '82 lot has been secured, the Hall put in excellent order, and several articles donated toward its furnishing. A small balance is due, for improvements.

"My parents, being of limited means, were barely able to give me even a common school education. It was not until the C. L. S. C. readings taught me what the advantage of an education was, that I had any desire to seek more knowledge. But before the four years' readings were ended I had fully made up my mind to study medicine. I have been compelled to go very slowly, but during the coming year, 1889, I will attend the Jefferson Medical College at Philadelphia. Should my ambition lead me to success, I have the C. L. S. C. to thank for it."—From an '88.

EDITOR'S OUTLOOK.

WOMEN AS LITERARY FORCES.

The present century has many distinguished traits, but in literature it always will be remembered as the epoch in which women first rose to a commanding influence. Here and there in other centuries single women have deserved praise for literary performance. But in this century many women have placed themselves in conspicuous lights as authors of prose and verse, and among the few names of authors which we are to transmit to far off ages as our best, the names of women are, perhaps, as numerous and conspicuous as those of men. If we try to select the six most eminent literary reputations of the century, we cannot leave out George Sand, George Eliot, and Mrs. Browning. If we judge by popularity and apparent permanence, we cannot leave out Harriet Beecher Stowe whose "Uncle Tom's Cabin" is probably the most widely read book of the century.

It is noteworthy that these four maintain their grasp on the mind of the world in a breadth of influence which, until this century, no author ever obtained so soon. A half century goes back to or beyond the beginning of their literary careers; but the whole world knows them and each has had millions of readers living in many lands and speaking all the great living tongues. This kind of contemporaneous universality of influence is altogether new in our time, and it makes a severer test of merit than any former age has been able to use. It is well to observe, also, that the English and American women have gained most of these honors of wide appreciation. They have been more honorably and more fully admitted to the intellectual competitions of all kinds. The result is seen in many ways. In the first place, there is no longer any sense of sex quality in our literary estimates. We have very rapidly, in a score or so of years, outlived the old doubt of woman's literary capacity.

Another effect of the intellectual advancement of women, especially in literature, is that below the highest, the competitors for the book or periodical market are so largely women that one must make an actual count to be sure that more men than women are contributors, novelists, poets, and press workers with the pen. Probably men still outnumber the women; but think what a change is implied in the very asking of the question. It could not have been asked fifty years ago, for women authors were still curious exceptions to a general rule that authorship was the proper business—not strictly the exclusive privilege—of men.

Note, also, that the change on which we are looking, has been accompanied with the general opening of the doors of learning to women, and that this extension of the intellectual domain of women is only just beginning to produce its effects. We are looking in fact upon one of the stupendous movements of our century, and we hardly can guess where it may end. If, for example, women have so soon won the honors of equality in these competitions that sex has disappeared from our view—so that we no longer study whether an anonymous author be of one or the other sex—what a powerful influence for the elevation of literature, and of morals through literature, must flow from the unchallenged literary equality! And in this connection, note, also, that nearly all the impure literature has a masculine origin. Very little even of the doubtful class of works comes from feminine hands. And if we hesitate over such a work as "The Quick or the Dead," we do not so much as imagine that the gifted authoress has designed and loved to make impure suggestions. Of what man whose work presents a similar doubt could we say, "He did not mean to suggest any improper thought or feeling"? In one word, women come into literature as a purer force, a force less liable to soil the mind and life of the reader. And the pure woman who wins a market for the products of her genius does by her very success diminish the market for tainted literary food.

Mrs. Burnett, Mrs. Amelia Barr, and a score like them will cure the next generation of the bad appetite which makes some men call "Little Lord Fauntleroy" "*goody-goody*," and "Hans Veder's Wife" "*too religious*." In short, women are purifying the largest of our modern streams of influence.

THE CHAUTAUQUA UNIONS AND THEIR OUTCOME.

In the past three years there has been a new development in the C. L. S. C. organization. It is known as the Chautauqua Union. The origin of the union is obvious enough. As in the first days of the C. L. S. C., solitary readers saw the advantages of meeting occasionally to talk over their readings and compare methods of work, and so formed the local circle, so later the circles saw the gains in association. The establishment and workings of these bodies have been reported from time to time in THE CHAUTAUQUAN. They have grown more numerous until in the present issue we report three new organizations, a state convention in South Carolina, another in Kansas, and a city union in Cincinnati. The strength and extent of the unions are such that it looks as if they had come to stay. What are their advantages? Are they sufficient to justify Chautauquans at other points in organizing? What outcome is there to them beyond that already shown?

The chief advantages which unions of a year or more of experience have found, are: lecture courses and evenings of scientific experiment requiring extensive apparatus; occasional gatherings of Chautauquans who otherwise would not meet; exchange of plans and methods; and the general stimulus and crystallization which result from gathering into a more compact order persons interested in a common cause. These results are especially noticeable in the city unions where frequent meetings are possible. In unions of longer radius like that of North-western Illinois, the yearly banquet bringing together representatives from different points, and schemes like the prize examinations for stimulating to close reading have been the most noteworthy features. The effect of these has been excellent, uniting the readers over wide stretches of territory into a compact and harmonious body.

These results are sufficient certainly to justify organization. There are others quite possible. In the program of the Brooklyn Assembly for the current year, we notice that arrangements have been made for the observance of Vesper Services occasionally and for an annual sermon. Where there are a large number of circles in a city a union simply for this purpose would not be in vain, and the unions already established ought certainly to adopt the plan. The city unions can easily manage lecture courses. The district and state unions have not, as far as we know, attempted courses in their limits. A very useful and entirely practical plan for them would be to secure a capable and entertaining speaker from some institution of learning to prepare courses of from six to twelve lectures on the favorite line of reading in the course. To illustrate, suppose that the new Kansas union should decide next year to put within reach of all the Chautauquans of the state a first-class course of ten lectures on Roman Literature. It could engage a professor in one of its universities or colleges to prepare them. The Chautauquans of Topeka, Parsons, Lawrence, Wamego, Winfield, Fort Scott, and other points, undoubtedly would be willing to pledge at each point \$50.00, and an hour every day or every other day for a period long enough to hear them. These lectures might be followed by Round Tables at which the discussion under the direction of the lecturer would be most suggestive and beneficial. If the lectures could be heard after the text-books have been read, so much the better.

For two years we have published in *Local Circles* brief reports of local studies made by members of the C. L. S. C. in various parts of the country. The union may do very much to encourage this kind of work, and its monthly or annual gatherings are eminently appropriate places at which to receive reports of the studies made.

Large numbers of Chautauquans would be glad of an opportunity to attend assemblies if they could afford it. The union can arrange for clubs by which low rates of travel and board can be secured, putting it within the means of many to go to Chautauqua or to some nearer gathering, when otherwise it would have been out of the question. This plan was carried out successfully last year in several associations. If a club cannot be formed, at least one or more members will go probably and they may be deputized to report their observations.

These are but the most obvious of many undertakings possible to associated Chautauquans. They illustrate the increased power which comes from co-operative efforts. Every union formed will have some peculiar need, and in supplying that will develop some new plans, but it will always find enlarged ideas, increased symmetry, and solidity, the best effects.

CHURCH WORK FOR CHILDREN.

In the spring of 1888 there was given to each child in the Sunday-school of the Stone Church of Meadville, Pa., a five-cent piece to be invested for the benefit of the fund for clothing the poor children of the Sabbath-school. The proceeds were to be returned on the following Thanksgiving Day, giving about eight months for investments. When Thanksgiving Day came, so thoroughly had the church community become interested in the project that a large and sympathetic audience gathered. The customary sermon was abandoned. The hour after the brief religious exercises was devoted to reading the reports from the children's investments, and a most unique and affecting service did it prove. The method by which the money had been earned was reported with each return, and the whole would form a most sprightly chapter in a work on commercial enterprise. One little fellow had bought "tix eggs, tet an old hen, and raised tix tickens." Three little girls had pooled nickels, and from 15 cents had made and sold fancy work until they had secured money enough to make articles for a bazar, at which they cleared \$20.00. Meadville is a college town and at the June commencement the five year old son of a college professor appeared on the campus with six quarts of lemonade made from 5 cents worth of lemon and sugar, all of which he sold—with profit to the poor fund. One boy had rented a lawn-mower for 5 cents and mowed a lawn for 25 cents. A little midget, with a knack for candy-making, had turned over her nickel until it had become \$5.00. Not all undertakings were such successes, as witness this letter of explanation from one young financier whose affairs had met with disaster:

"Dear Superintendent,—I bought ten eggs with my five cents. Now, I thought ten eggs would give ten chickens, which when grown I would sell for thirty cents apiece, making three dollars. So I set an old hen on the eggs, but after sitting a week she changed her mind and left the nest, spoiling all my plans, and my mother had to give me five cents to start again."

When the returns were counted, it was found that the \$8.25 distributed, had netted about \$120. The "5 cent plan" was voted a success, and the pastor, officers, and teachers said, Let us make it a feature of our Sunday-school work.

The fact that deeper results than the transient interest, the pleasing excitement, and the goodly addition to the poor fund came from the introduction of this plan, shows the wisdom of adopting the scheme permanently. One of the first results observed was the sense of responsibility it awakened among the children. Soon after the distribution of the money the parable of the talents came in the Berean lessons. The intrusting of the five-cent pieces to the children was used generally by the teachers as an illustration. Probably no parable of the Bible is

more full of meaning to the children of this school. They became impressed that they were stewards. The nickels became talents. They realized that they were responsible for the increase. They saw after a few experiments that if they were true to their trusts they must be cautious in their investments and continuous in their efforts. New ideas of economy and industry were awakened. No amount of explanation could have made them understand so clearly the value of time, the need of care in spending, the difficulty in making and keeping money. No games of chance or speculation were allowed, and here again an important lesson was taught—the difference between legitimate and illegitimate methods in business. The enterprise was worth more than a course in a business college to many a boy and girl.

A marked effect of this giving the children something to do was the interest it has made them feel in the church. One little fellow was heard to say not long ago, "They use us children in our church. We make the money to clothe the poor children." A child, like a grown person, begins to talk about "our church" so soon as he feels that he is a factor in making it.

The highest result has been the awakening of benevolent impulses. The children are told how the money is used; and every coat bought, every new pupil brought into the school, emphasizes afresh the good coming from their efforts. The blessedness of helping others is becoming gradually a conviction in their childish hearts. When unselfishness and helpfulness become natural, constant impulses, the child is not in danger of wandering from the church. The outcome of experiments with such schemes as the 5 cent fund, the "give-away" Christmas, giving children visiting among sick or poor companions, interesting them in improving their Sunday-school room, and like plans, we believe, will convince all that giving children practical church work to do, brings them close to the church and contributes largely to making them its staunch supporters when they become men and women.

GENEROUS GIFTS TO EDUCATION.

Statistics are generally thought to be dull reading. Not far from three fourths of the pages of the recently issued "Report of the Commissioner of Education" for the academic year 1886-7 bristle with figures; but these pages are dull only to him who has not yet learned what wealth of suggestion there often is in a column of digits variously combined with the mystic cipher. Our attention has been specially arrested by the contents of the fifteenth chapter, which is entirely devoted to an enumeration of the large personal gifts and bequests for educational purposes during the year above mentioned, no notice being taken of any sum less than five hundred dollars. This tabular-view puts us in possession of some interesting facts.

The grand total of noteworthy gifts and bequests for the year, we find to be \$4,828,143. More than two thirds of this amount was given in sums of \$100,000 and upward, and was distributed among nine institutions, four of them collegiate, one academic, three professional, and one technical. The largest single gift was Mr. Brewster's bequest of \$800,000 to the "Brewster Free Academy" at Wolfsborough, New Hampshire. The one institution most favored upon the whole was Harvard University, which fell heir to almost a million dollars, and whose single legacy of \$630,000 from Mr. Greenleaf came nearer than any other to equaling that of the Brewster Academy. Haverford College stands third with its \$500,000 from the estate of Mr. J. P. Jones. No law school received any very large gift, while one medical college in the West was remembered with \$125,000, and two friends of an educated ministry did not wait to die before bestowing upon the theological seminaries of their choice, one \$210,000 and the other \$100,000, the donor of the former sum being, remarkably enough, himself a minister. With the exception of these two last-mentioned gifts and one of \$100,000 to Brown University, all the sums of \$100,000 and upward were bequests.

Striking as is this record of a year's benefactions of generous-

minded citizens to the cause of education, it is a record which could probably be paralleled from almost any other year of the present decade, and which 1888-9 now seems likely to far surpass. In 1886-7 no millionaire gave even one of his millions that the rising generation might be thereby better equipped for the battle of life; but now what news do we read in our morning papers? One million dollars given by a single individual, to assist in the education of the colored children of the South! Nearly three millions, from one who was himself a poor boy, to give to the poor boys and girls of north-eastern Maryland an opportunity to learn just those things upon the knowing of which depends their chance of getting on in the world without being a burden to the world! Five millions, which may be increased to twelve, to teach to Pennsylvania boys the mechanical arts! One almost holds his breath at the report of such munificent deeds.

What most impresses us in view of all these facts is not the magnitude of individual gifts, more than princely as some of them are, but the evidence which they furnish of a growing feel-

ing of responsibility for the use of wealth on the part of those who, chiefly by their own efforts, have amassed large fortunes. That is given back to the public, as a rightful debt, which had been intrusted to the individual as a stewardship. So much, at least, of Gospel truth is coming to be better recognized, that of him to whom much has been given much will be required. Another of the most notable signs of the times is the growing tendency to make education more helpful to the masses of the people—to those who, lacking the support of favoring circumstances, are from the beginning at a disadvantage in the world's crowded race. This, however, would seem to be a newly awakened interest and not a simple transfer of fostering care from one set of institutions to another; for it appears that this flood-tide of generosity reaches even to the highest levels of education, bringing to the oldest universities and to the many varied nurseries of the liberal arts as well as to the people's training-schools that enriching which alone can insure the continued prosperity and healthful growth of our vigorous civilization.

EDITOR'S NOTE-BOOK.

Pennsylvania and Nebraska have decided to submit amendments to their constitutions, prohibiting the manufacture, sale, and importation of all intoxicating liquors as a beverage, to vote of the people. If all temperance reformers will unite in supporting the amendments, the probability of success will be large. Let Miss Frances E. Willard concentrate the strength of the W. C. T. U. in Pennsylvania and Nebraska until after the elections. Let ministers of the Gospel plead for the measure. Let all temperance orders and all organizations in which temperance is a platform plank, take up the agitation. Let it be conceded by all that no shade of partisan coloring shall rest on the measure, and that no small differences in opinion shall affect loyalty to it. Then the measure will go through. Pennsylvania and Nebraska have shown themselves in earnest about temperance reform, and if they secure the amendment it will be enforced.

One of the fairest and most convincing trials of prohibition yet made, has been in Cambridge, Mass. In May '87 a no-license law went into effect. The citizens determined it should be fairly tried. The mayor used his whole authority in enforcement. A bulletin published regularly all observations *pro* and *con* on the working of the measure. At the end of the year large numbers who had been but half-hearted supporters or opposers of no-license voted enthusiastically for a continuance of the system. The saloons have been closed. Arrests for all kinds of offenses have diminished. Physicians report the homes improved, employers better work done, landlords more prompt payment of rents. It is said even to be difficult to give away old clothes. This success is the citizen's success. Prohibition, or any other reform law, will not enforce itself.

Indianapolis, the home of President-elect Harrison, has vied with Washington in political attractiveness since November 4. Thither has been turned a procession of office-seekers seemingly endless. The line has been brightened by applicants with all sorts of wants, grave and ridiculous. Cabinet-making has been the great business going on. One strong lesson can be learned from watching the panorama. It is the dignity of silence. President Harrison has kept his own counsels and all parties respect him for his wisdom. It is evident that as one of his relatives remarked, he "will be his own President."

It would seem to be the simplest of things to get the electoral votes from each state into the iron safe in the vice-president's room at the capitol by the fourth Monday of January. But like

many other simple acts requiring exactness in details, irregularities almost invariably occur. This year the messenger from Texas came on to Washington without the names of the electors on the back of the envelope containing the vote, and a second trip was necessary. The messenger from Florida failed to reach the capitol on the day appointed and the law required Secretary Bayard to send a special messenger after the vote. The Colorado, Kansas, and Alabama messengers carried their credentials in the same envelope containing the vote. A separate certificate is necessary. Alabama's messenger had a certificate of his appointment for Mr. Ingalls but none for himself. No receipt could be given him until he went back to Montgomery for his extra certificate.

The mild state into which all the recent international misunderstandings have fallen, contrasts strongly with the turbulent treatment they received from the public when at their height. The Fishery treaty, the Sackville incident, the Panama Canal affair, all served as war scares. Now they are regarded merely as differences, irritating, of course, but which it would be folly not to treat with coolness and forbearance. Probably the Samoan trouble will soon be put into the same list.

Boulangerism remains as much of a mystery as ever. On January 27, Paris gave the General a large majority as its representative. It was prophesied in Europe and America that if this occurred, the ministry would go out, the republic fall, Boulanger become dictator, or the monarchy be restored. None of these things have happened at this writing—a week after the election. President Carnot and his cabinet deserve credit for keeping their heads as they did in the *mêlée*. The ministry resigned but the President refused to accept, and Minister Floquet gave the populace something to talk about by introducing a measure to change the system of department elections to district elections. It is not improbable that the approach of the exhibition will do something to quiet the country. Frenchmen enjoy success as well as change, and it must be apparent to France that to celebrate a Revolution by a Revolution will not be liable to attract many foreign sight-seers.

Australia has made a large contribution to honest elections. It consists of her system of voting now in vogue with minor modifications in England, Scotland, Ireland, and Canada and to go into effect this year in Massachusetts. New York, Connecticut, and Indiana are considering some form of this system.

Several state governors have advised their legislatures to consider ballot reform. The press is almost unanimous in its call for it. The essentials of the Australian system are that the ballots be printed and distributed at the public expense, that they be given out only by the official, be marked and seen only by the voter and that they be identified by the inspectors as official when returned.

If England has not done for Ireland what Home Rulers ask, she has been liberal in doing what the present government believes is best. Last year over \$3,000,000 were lent to Ireland for various public purposes and about \$1,250,000 for building houses for laborers under the Laborers Act. Statistics show that in 1888 business was much better than for a long time.

A prominent congressman, Major McKinley of Ohio, was asked recently by a leading magazine for his opinion on political union with Canada. He replied that he had no answer, adding, "It is a large question, altogether too large to guess off." There are people to be found both in and out of Congress who never meet a question "too large to guess off." To them we may credit the scares, the immature opinions, the suspicions, and the chimerical schemes which flood the public. If thinking questions through from beginning to end before speaking was a characteristic of public men, public opinion would be much more trustworthy than it is.

Since the beginning of the "trust," public opinion and the press have been against it. Lawyers and political economists have been divided in their opinion. At present the trust is under the ban of the law. In January, Judge Barrett of New York, gave the first important decision against it, when he annulled the charter of a sugar refining company on the grounds that by joining the Sugar Trust the shareholders had surrendered their shares and destroyed their corporate existence and that the trust was a combination in restraint of trade and therefore illegal. Of course the decision may be reversed. The bottom of the public conviction against the trust undoubtedly is that it is too much for human nature. A purely unselfish trust might be a great public benefit. But such a combination is clearly impossible.

The Medical Society of Virginia recently listened to a paper advocating vocal music as a preventive and cure for lung troubles. The theory is plausible. Singing gives exercise to all parts of the lung—furnishes complete lung-gymnastics, in short. The practical trials made have been very successful. It is said not to be uncommon for ailing patients to secure places in opera choruses in order to be able to sing regularly and with annoyance to nobody, or to take lessons from a skillful vocal instructor so that they may get the most thorough exercises.

Every trade has its own danger to the health of those who ply it. The book-keeper must guard against dyspepsia. The writer has paralysis and cramps in the hand and arm to fear. The glass-blower is in danger of consumption. "Railway spine" threatens men "on the road." Grinders in foundries succumb sooner or later to "stony chest." The "caisson disease" is the terror of bridge workmen. Since the activity in electrical works a new disease known as "electric prostration" has come to the knowledge of medical men. Whatever the business a threat to the physical man always hangs over it. A wise man will recognize this and learn the possible preventives.

In November last, eleven vessels were caught in the hurricane off the Bahamas. They all tried the use of oil on the "troubled waters." All outrode the gale. The United States Signal Office publishes their report, the gist of which is that a few gallons of oil saved the vessels, if not from destruction, at least from serious damage.

In his last message the Governor of Pennsylvania claimed that no expenditure of public money yielded the state so small a return as the road taxes. In other states equally poor results are secured. We have no adequate system of road-making in America, yet as Governor Beaver says, "They affect every inhabitant of the Commonwealth. We must all use them at some time or other, in some way or other. Their character and condition affect the breeding of our stock, the style of our vehicles, the carrying capacity of the farmer's wagon, and the speed and enjoyment of all who travel them for business or pleasure, either in the carriage, in the saddle, on the bicycle, or on foot."

New York City has been liberal with parks. She has never provided, however, a public garden which would like the Kew Gardens of England, serve both for instruction and recreation. The movement now stirring her park commissioners and botanical students will result, let us hope, in such an institution. But two cities of the country, Boston and St. Louis, have Botanical Gardens. In Boston, the city joined in 1883 with Harvard University in making from the Arnold Arboretum, then a college institution, a Botanical Garden attractive and open to the public, while prosecuting scientific tree culture and gathering a museum and herbarium. Shaw's Botanical Garden in St. Louis is with an adjoining park a gift to the city from Mr. Henry Shaw. It is the finest garden in this country, containing about fifty-five acres beautifully laid out. The scientific value of the garden has been popularized by attractive classifications, thus there is a plot devoted to the plants of the Bible, and another to economic plants.

American generosity is a market to which queer stock sometimes comes. Delphi, the site of the Greek oracle and temple, the most promising field for digging left in Europe, the apple of the archaeologist's eye, is a late comer. The French had the refusal of the site but have declined. The Greeks have offered it to the Americans. \$80,000 are necessary to secure it. This money is asked now from private benevolence. The practical mind naturally asks what is Delphi worth, and suggests industrial schools or foreign missions as a better channel for the money. Nobody questions now the need of the past in understanding the present. If knowledge of the past is of any use, then all that adds to its completeness and exactness is worth doing, whatever the cost. The unearthing of Delphi will give undoubtedly many new facts on Greek life. It will be to the honor of America if the generosity of her citizens make these contributions to the sum of human knowledge.

If anybody has need of all-around culture it is he who goes among the degraded and uncivilized as a missionary. As an illustration, here are some of the things which the enthusiastic worker in charge of the Omaha Mission for Indians reports as among his duties in the last year: the amputation of an Indian's leg; the planting of five hundred trees; mending wagon wheels, plows, household furniture, roofs, and pumps; painting doors, houses, and furniture; papering rooms; and making fence. Besides this, there was the regular work of preaching the Gospel, teaching, and training.

"Toynbee reads his Bible like any other book—as if he liked it"—was the comment of an observant fellow-student of Arnold Toynbee. The young fellow evidently knew few people who read the Bible save as a religious duty. Few of us do. The popular feeling is that the Bible is exclusively a religious guide and to be read only for personal application. Its value as a historical document, as a portrayal of character, as literature of the finest quality, as a moral code, and as a link in the development of government and society, is generally unrecognized. We believe that there is no book of such varied and general interest as the Bible, and that an appreciation of its many sidedness would increase its usefulness to every reader. The wide-spread

and growing demand for placing the Bible in the college curriculum as a study, will do much to bring it into the realm of books read 'as if one liked them.'

The last days of January and the first of February saw a general tie-up of the street-car lines of New York City. The hot-headed among the strikers and their violent sympathizers threw discredit on the movement by rioting. Thanks to the efficiency of the police, but one life was lost, and no serious damage was caused to property. There can be no excuse for imperiling the lives and property of the innocent, whatever the wrongs under which a body of men may be smarting. There is no commendation too high for brave men who, forgetting comfort and safety, compel at the risk of their own lives, order and law.

Pittsfield, Mass., has introduced into her police service a modification of the police matron. Massachusetts requires all cities of 20,000 and over to provide police-matrons. Pittsfield has less but felt that the occasional women prisoners brought to the station-house should be given a woman's care. A person was hired to serve only when needed. She took the prisoner from the officer, prepared her for her trial, often attended her there, gave her advice, and, if possible, helped her to an opportunity for a better life when released. The practice is so simple and humane that towns and small cities everywhere ought to follow Pittsfield's plan.

"But now he's gone, and my idolatrous fancy must sanctify his relics," such was the inscription which the late Mr. Halliwell-Phillips, the famous Shakspeare scholar, wrote above a list of his Shaksperian treasures. Sixty-eight years of age at death, he had spent almost his whole life in antiquarian study. His writings and collections were enormous. Most of his life he was poor. But he loved his study more than "getting on in the world" and preferred living on a limited income with Shakspeare than on more means without him. A fortune came to Mr. Phillips in '72 and since, he has used his great knowledge in collecting the choicest relics of the dramatist and his time. Visitors at Stratford have Mr. Phillips to remember as one of the

leaders in preserving the home and garden of Shakspeare. A portion of his collection will come to the New York Shakspeare society.

Every reader of Volume IX. of *THE CHAUTAUQUAN*, who has not already decided that he wants to go to Chautauqua next summer will be sure, promptly so to decide when he reads the announcement for the session in the present issue. Prof. Mahaffy of Ireland who has been guiding us into all the interesting places and developments of Modern Greece in his "Gossip," is to be there from August 6-17. He will deliver two courses of lectures. Two other favorite contributors to *THE CHAUTAUQUAN*, new to the assembly, will deliver courses of lectures next season, the Rev. Washington Gladden and Prof. H. H. Boyesen. The program for the Sixteenth Season, so far as announced, is full of splendid attractions. Its subjects are captivating; its speakers eminent and many; its specialties well-chosen and well-manned.

The graduates from the Class of '88 of the Chautauqua Literary and Scientific Circle will form a prominent feature in *THE CHAUTAUQUAN* for April. The names of about 3,900 persons will appear who have read the prescribed readings for four years and made out memoranda on them. It will be a notable gathering; an honor roll in which almost every name stands for enlarged purposes, fuller capacity for enjoyment, and better views of life and duty. We should be glad to know how many of these graduates are keeping up some advanced course of reading. That more of the '88's have continued their Chautauqua connections than of any previous class, all reports show.

The last report from the Commissioner of Education recognizes fully the place Chautauqua has won in the educational world. In his chapter on Educational Associations and Conventions he gives more space to the Chautauqua Assemblies than to any other gatherings save the National Educational Association. The report is made up from the data which *THE CHAUTAUQUAN* gathers each year and publishes in its July pre-view and October review of Assembly work. These reports, by the way, are the only complete ones published.

C. L. S. C. NOTES ON REQUIRED READINGS FOR MARCH.

CHEMISTRY.

P. 79. "Wieliczka" (wē-litch'ka). These mines measure, counting all their galleries, 30 miles in length, and about 1,000 feet in depth. They are divided into three distinct compartments called "fields," which are five or seven stories high. Each story contains numerous chambers connected by passages, and the different stories are reached by means of stairs cut in the salt. After the miners have worked the chambers, they are sometimes prepared for chapels, or for ball rooms and dining halls, on occasions of festivity; and are suitably furnished and decorated by carving every thing from the rock-salt. In the chapels are altars, crucifixes, niches, pedestals and statues upon them, all sparkling as with countless diamonds. Columns of salt are left to support the roof.

"Cardona." This is one of the most remarkable mines in Europe. The salt appears upon the surface in the form of a hill 500 feet high which covers an area about three fourths of a mile square. The salt is so pure that it only needs grinding to be fit for use.

"Cheshire." Rock salt was discovered at this place in 1670, when search was being made for coal. It is mostly obtained from wells about 200 feet deep, and the brine is pumped into large evaporating pans.

P. 86. "Berthollet" (ber-tol-lā), Claude Louis. (1748-1822.)

P. 94. "Justus von Liebig." (1803-1873.) A German discoverer, especially renowned in organic chemistry. He founded

in the University of Giessen, Germany, the first model laboratory of Germany, which made that institution the great point of attraction for students of chemistry. He wrote several scientific works.

Plate IV. (Between pp. 96 and 97.) "Actinic, or chemical, rays of sunlight." "In numerous phenomena light acts as a chemical agent. For instance, chloride of silver blackens under the influence of light; transparent phosphorus becomes opaque; vegetable coloring matters fade; hydrogen and chlorine gases, when mixed, combine slowly in diffused light, and with explosive violence when exposed to direct sunlight. The chemical action differs in different parts of the spectrum" [the band of colors formed on a screen by allowing a ray of light to pass through a prism].—*Ganot's "Physics."*

P. 100. "Varech" (var'ek).

P. 101. "Ampère" (ong-pair), Andre Marie. (1775-1836.) A French physicist who won his greatest fame by his discoveries in electro-magnetism. He gave the name "Electro-Dynamics" to this new science.

P. 108. "Puymaurin" (pwē-mō-rang), Nicholas Joseph. (1718-1791.) A French painter.

P. 109. "Haüy" (hā-wē), Rene' Just. (1743-1822.) A French mineralogist, a member of the Academy of Sciences.

P. 111. "*Cet air que nous avons decouvert*," etc. "This air which we discovered about the same time, Dr. Priestley, Mr. Scheele, and I."

P. 113. "The village in Pennsylvania," in which Priestley settled was Northumberland, 60 miles north of Harrisburg.

P. 115. "Liquefaction of gases." In 1877 Messrs. Cailletet (French) and Pictet (Swiss) succeeded in liquefying all the so-called permanent gases, by subjecting them at the same time to intense cold and pressure. The two men worked unknown to each other and by methods very different, the former meeting with success November 26, and the latter on December 24. (See *The Popular Science Monthly* for March and for May, 1878, and for December, 1884.)

P. 121. The true nature of the diamond was demonstrated by the following experiment: "A diamond was enclosed in a cavity made in a piece of soft iron. A stopper of the same metal was driven into it, and the mass was put into a crucible, and this into another, the space between them being filled with sand. The whole was then subjected to an intense heat. When examined, the diamond had disappeared, but the iron with which it had been in contact was changed into steel. Steel is a compound of iron and carbon; as there was no source from which the carbon could have been derived, the conclusion was unavoidable that the diamond was pure carbon."—*Fireside Philosophy*.

P. 123. Fig. 34. The composition of water by weight was determined by heating a weighed portion of cupric oxide in a stream of pure dry hydrogen, and weighing the quantity of water obtained. The operation is executed by means of the apparatus represented in the figure. The hydrogen generated (as shown on p. 62) in the flask at the left of figure 34, is dried in the series of bent tubes which contain substances that will absorb water. The bulb tube, A, of difficultly fusible glass, contains the weighed amount of cupric oxide, and is heated with a lamp. The water which forms collects in the bulb, B, and what might escape in form of vapor is completely absorbed in the bent tubes at the right of B. The hydrogen passes over the cupric oxide in A, until the latter is reduced to red metallic copper which is then allowed to cool, when A is weighed again, and the bulb B and the tubes at the right of it are weighed together. The loss of weight in A expresses the quantity of oxygen which has combined with hydrogen to form water. The increase of weight of the bulb B and the tubes, gives the quantity of water which has formed. The difference between the two shows the amount of hydrogen in the water.

"Dumas" (dü-mä), Jean Baptiste. (1800-1884.) An eminent French chemist.

P. 126. "Drummond light." It was so called from the name of its inventor, Thomas Drummond (1797-1840), a British naval officer. He conceived the idea that the incandescence of lime might be made to serve, instead of the argand lamp, for lighting distant stations in the survey of the United Kingdom, in which he was employed. At its first trial the light was seen 66 miles distant, and later it was said to be visible 112 miles away. The dazzling light emitted by the heated lime, Drummond placed in the focus of a parabolic mirror, which reflected the rays in parallel lines, thus directing the whole light toward a single point.

P. 141. "Water-shed." A range of high land lying between two river systems; the waters, drained from one side of it reach one river, and those from the opposite side are finally discharged into the other river.

P. 143. "Artesian wells." They are so named from having been long in use in Artois, France. Their principle is the same as that of an artificial fountain. A basin-shaped bed of porous rock lies between two rock beds which are impermeable. The porous rock becomes saturated with water which cannot escape. When a well is sunk into it the pressure sends the water up through it.

P. 149. "Iron pyrites." The word py-rī-tēs is derived from the Greek word for fire, and was given to sulphuret of iron because it gives off sparks of fire when struck with steel. There are three kinds of iron pyrites, yellow, white, and magnetic. The first bears a close resemblance to gold, and from the fact

that many hunters for the precious metal have been deceived by it, it has been called "fool's gold."

P. 164. "Borax Lake." A shallow pool of intensely alkaline water, about 80 miles north of San Francisco. In a very wet season it may reach a length of a mile and a half; in a very dry one, it contains sometimes no water at all. In the muddy bottom are found pure borax crystals in immense quantity, equal to the best of refined borax. The development of the lake was begun in 1864, and such was the yield that in a short time the borax trade in the United States was revolutionized. The mud is a smooth clay of unknown depth, but the borax crystals have not been found below about five feet. The crystals are deposited in layers, from one to four inches thick; and at the depth of about two feet are so closely packed as to have almost no mud mixed with them. Below this depth fewer but larger crystals are found. Of the latter most are over two inches in length, and several weighing a pound each and measuring 5 to 7 inches by 2 to 4 have been removed.—Borax has the property at a high temperature of dissolving metallic oxides and forming transparent glasses,—the color given depending on the metal used; cobalt oxide gives a blue glass; chromium oxide, a green glass, etc.—On this account borax is used largely in making enamels, glass, and porcelain.

"ZOOLOGY."

Preface.—P. V. "Comparative Anatomy." See "Appendix," pp. 283-286.

P. VI. "Penult." The syllable which precedes the last in any word.

P. XI. "Protoplasm." The word is derived from two Greek words meaning "first" and "form." (See Index of the text-book for this and for other definitions.) It was at first applied only to the vital vegetable substance; but now is defined as "the universal life substance from which all organisms, whether vegetable or animal, originate, and modifications of which constitute even the most complex tissues of the highest animal forms."

"Forms in the two kingdoms which almost defy distinction." There is a little slimy mass found in damp moss which only after a long dispute between botanists and zoologists was decided to belong to the realm of the former. This little organism moves slowly and in every direction without any visible feet. Yet, during a part of its existence, at least, it is now known to be distinctively a plant, and propagates by spores.—In 1853 the bacteria were relegated to the vegetable kingdom, and yet in many species motion may be observed.—In studying some microscopic algæ (sea-weeds), the botanist Unger saw some round bodies dart out of the fibers, and move to and fro in the water.—Some plants seem to possess the sense of touch, as the familiar mimosa, or sensitive plant.—The insect-eating plants are possessed of a faculty attributed to animals only. The Venus fly-trap will suddenly fold up a bristly leaf upon which a fly chances to light, and when after several days, it opens again, the fly is not to be seen; it has been consumed.—Many of the corals and the crinoids of the ocean were long taken for plants.—It was only after long study that sponges and chalk were known to belong to the animal kingdom.

P. XIII. "Vertebrates." Animals having a backbone, or vertebral column. (See "Index" of text-book.)

P. I. "Diatoms." These are minute plants growing in fresh or salt water, or in moist places. They show great variety of form, but the majority are shaped like a boat; they also vary in their manner of growth, some being free, others attached to foreign bodies. The soft part is covered by a silicious case, consisting of two valves, similar, but one a little smaller than the other, so that they fit into each other as a box and its cover. The plants are possessed of an extraordinary power of motion, some species moving slowly back and forth, others darting through the water in a zig-zag course. The cause of this motion remains unknown. A most remarkable deposit of the

shells is found at Richmond, Va., covering a surface of a number of miles in extent, and reaching in places a depth of forty feet. A part of Berlin, Germany, is built on a bed of diatoms, the upper layer of which is still alive. The complicated tracings of the shells make the organisms truly elegant. Polishing powders sold under the name tripoli are made of these remains. (See cut on page 252 of Appleton's "Hand-Book of Chemistry.")

P. 3. "Calcareous." Consisting of carbonate of lime, or limestone.

The "chalk-cliffs" seen along the shores of the North Sea and the English Channel reach in places a height of 1,000 feet, and are so brilliantly white as to dazzle the eyes. This formation is traced from the north of Ireland south-east across the continent to the Crimea.

"Marl beds." The most northerly appearance of these beds in the United States is in New Jersey, where a greensand marl belt crosses the state from the north-east to the south-west, from the ocean to the Delaware River, a distance of about ninety miles. The bed varies in width from ten to six miles. Beds of this formation are found all along the Atlantic coast to Florida and in all the states bordering on the Gulf of Mexico; also in some of the inland states. Fresh water marls are found widely distributed through the country, frequently occurring in marshy places near small lakes. Marl is largely used on lands as a fertilizer.

P. 4. "Silicious." Consisting of silicon. (See p. 251 of Appleton's Chemistry.)

P. 7. "Metazoa." As protozoa means "first life," so metazoa means "beyond life," or "after life," as applied in the development of the animal kingdom to the later and higher forms of structure.

P. 8. "Sponges." The sponges of commerce are procured mostly in the Mediterranean Sea and the Bahama Islands. They are obtained by diving, persons being trained for this business in the Greek islands. When first taken from the water they have a disagreeable odor. They are buried in dry sand, and when the decomposition of their animal matter has ceased, they are placed in wire cages along the sea-shore where they are washed by the tides. They are then dipped in hydro-chloric acid, which dissolves the calcareous matter, and after this, in hydro-sulphite of soda, which bleaches them.

P. 9. "Huxley," Thomas Henry. (1825—.) An eminent English naturalist.

P. 10. "Hydrozoa." "Water life," or "water animals." Notice the similarity between this word and the word hydrogen.

P. 16. "Dana," James Dwight. (1813—.) A distinguished American naturalist, author of a number of books on the natural sciences.

P. 18. "Crinoidea." The word comes through the Latin from Greek, and is derived from two words meaning "lily" and "form."

"Brachiata." Having branches like arms.

P. 27. "Filiform." Thread-like.

P. 29. "Earth-worms." It is known that when worms cannot get leaves with which to plug up their burrows, they use small stones. The following incident will serve to show, at the same time, the strength and the intelligence of these creatures: "A lady interested in this study, removed the little heaps of stones from the mouths of several burrows, and cleared the surface of the ground for some inches around. She went out on the following night with a lantern, and saw the worms, with their tails fixed in the burrows, dragging the stones inward by the aid of their mouths. After two nights some of the holes had eight or nine small stones over them, and after four nights one

burrow had about thirty and another thirty-four; and one of the stones weighed two ounces."

P. 32. "Polyzoa." "Many animals," so called because many animals are united in one structure.

P. 37. "The oyster's age." Professor Samuel Lockwood tells in *The Popular Science Monthly* for February, 1882, of counting on a venerable oyster that was sent to him as a rare specimen, thirty of these grooves, showing conclusively that the animal must be thirty years old. He states his belief that if the bivalve had remained undisturbed, it might have lived and grown ten years longer.

P. 40. "The ship-worm." The only successful remedies, among the almost countless number that have been attempted against the depredations of this creature, have been metal sheathing over the wood, broad headed nails driven so closely as to allow the heads to touch, and the application of the oil of creosote to the wood. If the wood is thoroughly treated with this product, and the oil is of a good quality, it has been proved by numerous experiments that the teredo will not molest it. This oil also prevents wood from decaying, and on this account is used largely by railway companies in car building. "The process of applying it is called creosoting, and is effected by the method of exhaustion and subsequent injection by intense pressure (150 pounds or more to the square inch) which is continued for 48 hours or longer."

P. 49. "Cuttle-fish." Dr. Andrew Wilson says: "One of the most remarkable traits of cuttle-fish existence is the curious play of 'shot' colors which takes place in their integument. I have seen a squid stranded on a sea beach make glorious its dying agonies by a play of colors of the most astounding description. The natural purplish tint of the body was now and again deepened to well-nigh a dark blue; the slightest touch served to develop a patch of angry pink; and continually over the whole surface of the body the hues and tints ranging from dark purple to light red, succeeded each other in rapid array."

P. 53. "Pedunculate." Growing on a stem or stalk.

P. 57. "Trilobites." Fossil crustaceans, so called from the three lobes into which the body was divided. They lived in the Palæozoic Age, and were not closely allied to any living crustaceans. Scientists have been greatly interested in them, not only on account of their numbers, but also for their peculiar forms, and the perfect state in which their shells have been preserved. Cuts of them may be seen in Webster's Dictionary and in the cyclopedias, as well as in several text-books on geology.

P. 70. "Asexual." Having no distinct sex.

P. 71. "Cochineal-bug." This is a small insect having its body wrinkled transversely. It is of a deep mulberry color. It feeds upon a species of cactus, large plantations of which are cultivated for the sake of the insects which are carefully tended. In Mexico, about the last of October, these plantations are stocked from the supplies which have been preserved under shelter during the rainy season on branches cut from the shrubs. They increase rapidly in numbers, and when ready for use as dye, they are picked off and killed by dipping them in a basket into hot water or placing them in a hot oven. They are then dried when they look like small grains. It takes about 70,000 of them to weigh a pound.

P. 79. "Parasitic ichneumons." The note at the bottom of the page helps one to more fully understand and appreciate the following stanza from Swift's poem, "Poetry, a Rhapsody":

"So, naturalists observe, a flea
Has smaller fleas that on him prey;
And these have smaller still to bite 'em;
And so proceed *ad infinitum*."

NOTES ON REQUIRED READING IN "THE CHAUTAUQUAN."

GOSSIP ABOUT GREECE.

1. "Hannibal." (About 247-183 B. C.) The great Carthaginian general. "When but nine years old he was taken to

Spain by his father, who then caused him solemnly to swear on the altar of the gods an eternal hostility to the Romans—an oath which he appears never to have forgotten." His life was passed

in warring against them; and at last, defeated, and about to fall a prisoner into their hands, he killed himself by poison.

2. "Colocotroni," Theodore. (1770-1847.) A Greek patriot, who distinguished himself in many engagements with the Turks, and was made commander-in-chief of the Peloponnesus in 1823. King Otho made him councilor of state.

3. "El Dorado." A Spanish term meaning "the golden region." One of the officers of Pizarro (the Spanish conqueror of Peru 1475-1541), pretended that between the Orinoco and the Amazon in South America, he had found a land of gold. Sir Walter Raleigh thought Guiana must be the place denoted, and paid two visits to the spot. Afterward he wrote a glowing account of its enormous wealth.

4. "The Statue of Memnon." According to Homer, Memnon led a force of Ethiopians to the assistance of the Trojans against the Greeks, and was slain by Achilles. In later times he was confounded with the Egyptian King Amenophis, whose statue erected in Thebes was said to utter a sound when the first rays of the morning sun struck it. The height of the statue is about forty-seven feet and it stands upon a pedestal twelve feet high. The upper half has been broken off and then restored. There are written on the lower part of it seventy-two inscriptions by different persons,—including among the number the Emperor Hadrian, Empress Sabina, and several officers of Egypt—stating that they have heard the voice of the statue, which sounded like the twanging of a harp string, or as a plate of brass does when struck. Among the several conjectures made as to the cause of this sound (if it was an actual fact), is the following:—There is a square hole in the back of the statue which would admit a person who could be concealed within. It was probably to this statue that Horace Smith refers in his "Address to a Mummy":

"And thou hast walked about (how strange a story!)

In Thebes's streets three thousand years ago,
When the Memnonium was in all its glory."

5. "Battle of Actium." It was here that Augustus conquered Mark Antony in a great naval battle. Cleopatra who had reinforced the fleet with sixty ships was put to flight, and Antony, deserting his army, soon followed her.

6. "Odysseus." A Greek general who surrendered himself—treacherously it was thought—to the Turkish commander, Reschid Pasha, who marched against him in 1824. He was afterward taken from the Turks by the Greeks, and was held in close confinement in the Acropolis at Athens. His body was found shortly after under a tower from which it was said he fell in trying to escape. But it was strongly suspected that Greek leaders had secretly caused him to be put to death.

7. "Trelawny has told us as much of his adventures as he thought fit in his fascinating "Recollections of Shelley and Byron," republished in two volumes, a few years ago."—*J. P. Mahaffy*.

ALCIBIADES.

1. "Eleusinian mysteries." These were celebrated yearly at Eleusis and Athens in honor of the goddess Demeter, or Ceres. The popular tradition of the origin was that Demeter while searching for her daughter, Persephone, came to Attica where she taught the inhabitants the use of corn and instituted the mysteries. The celebration lasted for nine days. On the first day those who had been already initiated into the lesser mysteries assembled at Athens. On the second they walked to the sea and were purified. The third appears to have been a day of fasting, and, according to some authorities, sacrifices of fish and cakes of barley from the Rarian plain were offered. On the fourth day the procession of the sacred basket took place. This basket contained pomegranates and poppy seeds, and was drawn in a cart by oxen, and followed by women bearing mystic cases. The fifth day appears to have been known as the torch-day, and probably symbolized the search of Demeter for Persephone. The initiated walked with torches to the temple of Demeter at Eleusis. On the sixth day the votaries under an awful oath of

secrecy were admitted into the inner sanctuary, where they were allowed to see the "sacred things." On the seventh they returned to Athens with jests and music, resting at the bridge over the Cephissus where they ridiculed all who passed. The eighth is supposed to have been added to initiate those who were not able to attend on the sixth. On the ninth day two vessels filled with wine or water were emptied, one toward the east, and the other toward the west, by the priests who at the same time uttered mystical words. The unity of God and the immortality of the soul are supposed to have been the secret doctrine of the mysteries.—*From the description in Johnson's Cyclopædia.*

2. "The death of Alcibiades." He rushed out of the dwelling, sword in hand, prepared to defend himself, but he fell pierced with arrows. Different reports say that the murderers were employed by the Spartans, and by the brothers of a lady whom Alcibiades had wronged. He left one son, named after himself.

GREEK ART.

1. "Terminus." "A Roman divinity presiding over boundaries and frontiers. His worship is said to have been instituted by Numa [the second king of Rome], who ordered that everyone should mark the boundaries of his landed property by stones consecrated to Jupiter, and at these boundary stones every year sacrifices should be offered." *Smith's "Classical Dictionary."*

2. "Parsifal." The name, by different romancists and poets, is written also Parcival, Percival, and Percivale. The "San Greal," said to have been the cup used by Christ at the Last Supper, has formed one of the great themes of romance. According to the legends it was preserved by Joseph of Arimathea, and descended to members of his family, until its last possessor sinned, when it immediately disappeared. The Knights of the Round Table went in quest of it. Some writers say that Sir Galahad, and others, that Sir Parsifal, who possessed perfect purity, was permitted to find and see it, and that then the holy chalice was taken to heaven. There is preserved, however, in the Cathedral of Genoa, a cup which was discovered by the Crusaders in 1101, which is claimed to be the real San Greal.

3. "Dædalus." Sculptors for many ages claimed actual descent from Dædalus, and from this fact were called Dædalids, or Dædalidæ. "Their works, known as *dædala*, represent the first attempts to replace the blocks of wood and stone which originally symbolized the images of deities, by statues having some resemblance to life or nature."

4. "Mulciber." The name was coined directly from the Latin verb *mulceo*, to soften. It was said to have been given to Vulcan as a euphemism, that he might not destroy the property of men, but rather aid them in their undertakings.

SUNDAY READINGS.

1. "F. D. Maurice." (1805-1872.) An English divine who was one of the leaders in the Broad Church party. He published several religious works.

2. "Horace Bushnell." (1802-1876) An eminent American Congregationalist minister. He was thought to be one of the most eloquent preachers and accomplished writers of New England.

3. "Robert Hall." (1764-1831.) A distinguished English Baptist minister. He presented in childhood a remarkable instance of precocity, reading with interest before he was nine years old the treatises of Jonathan Edwards. As a result of severe and long-continued over study he suffered for two years (1804-6) from an attack of insanity, but he entirely and permanently recovered from it.

SOCIAL EFFECTS OF THE SEWING-MACHINE.

1. "Parton," James. (1822—.) An American author. At the age of five years he was brought from England, his birthplace, to New York. In the early years of his manhood, he was a teacher, but since that time has devoted himself exclusively to literature, having published many books and having been a con-

stant contributor to periodicals. The book from which the quotation in Mr. Ingersoll's article is made, is "Triumphs of Industry." He was the husband of Fanny Fern.

2. "Panic of 1837." "In the first year of Van Buren's administration the country was afflicted with a monetary panic of the most serious character. The preceding years had been a time of great prosperity . . . Owing to the abundance of money, speculations of all sorts grew rife. The credit system pervaded every department of business. The banks of the country were suddenly multiplied to nearly seven hundred. Vast issues of irredeemable paper stimulated the speculative spirit and increased the opportunities for fraud. . . . Speculators made a rush to secure public lands while money was plenty. But President Jackson had issued the Specie Circular by which land agents were directed to receive nothing but coin in payment for the land. The effects of this circular came upon the nation in the first year of Van Buren's administration. . . . The business of the country was prostrated by the shock. The banks suspended specie payment. Mercantile houses failed, and disaster swept through every avenue of trade."—*Ridpath's "History of the United States."*

3. This account is found in the "British Almanac and Companion for 1877."

4. "Crispins." Shoemakers. They received this name from the patron saint of their craft, St. Crispin. It is said that he and his brother Crispinian were converts to the Christian religion, and having suffered persecution in Rome under Diocletian, they fled to France, where they preached the gospel, supporting themselves by working at shoemaking. They both suffered martyrdom under Maximian.

5. "Flemish tapestry." "The finest work [in tapestry] in the fourteenth and fifteenth centuries was produced by the Flemings, and one of the principal manufactures of this period in the west of Europe was in Bruges. It is said that its productions excelled those of all others."—"The Flemings sought to enrich them [tapestries] with historic subjects of the highest order; and so important did this art become that the most eminent masters in painting, from Raphael downward, bestowed their greatest efforts upon cartoons to serve as copies for the tapestry workers."—*The People's Cyclopaedia.*

6. "Professor Renwick," James. (1792-1863.) An American physicist, professor of chemistry and physics in Columbia College from 1820 to 1854. He was the author of a number of scientific works.

7. "Eli Whitney." (1765-1825.) The famous American inventor.

8. These remarks of Mr. Carroll Wright are found in the "Reports of the Tenth Census of the United States," 1880. Vol. II. p. 566.—*Ernest Ingersoll.*

THE CARE OF CRIMINALS.

1. "Mrs. Fry," Elizabeth. (1780-1845.) A great English philanthropist who did much both for the reformation of prisoners and toward instituting a reform in the methods of treating them.

2. "Régime," *rā-zheem.* A French word meaning "mode of management."

THE COMMERCIAL RELATIONS OF AMERICAN COUNTRIES.

1. "Zoll Verein." The name was applied to an association of German States, instituted for the purpose of levying uniform taxes on imported goods and establishing internal free trade. It was inaugurated in 1819.

2. Professor Morse takes the quotation from Goldwin Smith's Letter to the *London Times*, November 4, 1887.

ASTRONOMICAL NOTES FOR MARCH, 1889.

THE SUN.—On the 1st, declination $7^{\circ} 18' 41''.6$ south, and on the 31st, $4^{\circ} 25' 35''$ north, having crossed the equator on the 20th, at 4:43 a. m. Sun rises on the 1st, 11th, and 21st, at 6:34, 6:18, and 6:02 a. m., respectively, and sets on the corresponding days at 5:52, 6:03, and 6:13 p. m., respectively. The increase in the length of the day is one hour nineteen minutes. Spring opens on the 20th, on which day theoretically the day and night are of equal length; but on account of the refraction of the sun's rays, the day and night are of equal length about the 17th.

THE MOON.—The phases are as follows: new on the 1st, at 4:52 p. m.; first quarter on the 9th, at 12:51 p. m.; full on the 17th, at 6:39 a. m.; last quarter on the 24th, at 1:46 a. m.; and new again on the 31st, at 6:29 a. m. Is nearest the earth on the 21st, at 7:36 a. m.; is farthest away on the 9th, at 4:12 a. m.; sets on the 2nd, at 6:51 p. m., on the 11th, at 2:39 a. m., and rises on the 21st, at 11:12 p. m.

MERCURY.—Rises on the 1st, at 5:31 a. m., and sets at 3:51 p. m.; on the 11th, rises at 5:16 a. m., and sets at 3:38 p. m.; on the 21st, rises at 5:10 a. m., and sets at 3:54 p. m.; has a direct motion of $33^{\circ} 53' 36''$. On the 8th, at 10:46 p. m., crosses the ecliptic going south; on the 13th, at 6:00 a. m., is at its greatest elongation ($27^{\circ} 53'$) west, and for a few days before and after this date, is visible to the naked eye. On the 18th, at 3:49 p. m., is farthest from the sun; on the 29th, at 6:53 a. m., is $2^{\circ} 02'$ north of the moon. Diameter on the 1st, $8''.8$; on the 31st, $5''.6$.

VENUS.—Makes a direct motion of $19^{\circ} 06' 28''$; is an evening star, setting on the 1st, 11th, and 21st, respectively, at 9:44, 9:52, and 9:52 p. m.; on the 5th, at 5:32 a. m., is $8^{\circ} 58'$ north of the moon; on the same date, at 3:00 p. m., is nearest the sun; on the 25th, at 1:00 p. m., reaches its greatest brilliancy; diameter on the 1st, $27''.8$; on the 31st, $42''.6$.

MARS.—Has a direct motion of $21^{\circ} 33' 09''$; is an evening star, setting on the 1st, 11th, and 21st, at 8:07, 8:06, and 8:05 p. m., respectively; on the 3rd, at 6:45 p. m. is $5^{\circ} 02'$ north of the moon; diameter on the 1st, $4''.6$; on the 31st, $4''.4$.

JUPITER.—Has a direct motion of $3^{\circ} 51' 30''$; is a morning star, rising on the 1st, 11th, and 21st, at 3:05, 2:31, and 1:57 a. m., respectively; on the 24th, at 7:00 p. m., is $41'$ south of the moon; on the 27th, at 7:00 a. m., is 90° west of the sun; diameter on the 1st, $33''.6$; on the 31st, $37''$.

SATURN.—Has a retrograde motion of $1^{\circ} 22' 23''$; on the 1st, rises at 3:29 p. m., sets on the 2nd, at 5:33 a. m.; on the 11th, rises at 2:46 p. m., sets at 4:52 a. m. on the 12th; on the 21st, rises at 2:05 p. m., and sets at 4:11 a. m. on the 22nd; on the 14th, at 1:02 a. m., is $1^{\circ} 00'$ south of the moon; diameter diminishes from $19''$ on the 1st to $18''.2$ on the 31st.

URANUS.—Has a retrograde motion of $1^{\circ} 04' 43''$; rises Feb. 28th, at 9:10 p. m., and sets on the 1st, at 8:16 a. m.; on the 10th, rises at 8:24 p. m., and sets on the 11th, at 7:32 a. m.; on the 20th, rises at 7:43 p. m., and sets on the 21st, at 6:51 a. m.; on the 18th, at 8:10 p. m., is $4^{\circ} 44'$ south of the moon; diameter, $3''.8$.

NEPTUNE.—Has a direct motion of $37' 55''$; is an evening star, setting on the 2nd, at 12:17 a. m., and on the 11th, and 21st, at 11:32 and 11:01 p. m., respectively; on the 7th, at 8:00 p. m., is $2^{\circ} 20'$ north of the moon; diameter, $2''.6$.

OCCULTATIONS (MOON).—March 8, *B. A. C.* 1468, from 8:32 to 9:30 p. m.; on the 8th, *i Tauri*, from 11:28 p. m. to 12:10 a. m., on the 9th; on the 12th, *63 Geminorum*, from 12:50 to 1:47 a. m.; on the 24th, JUPITER, from 6:34 to 7:35 a. m. (All Washington Mean Time.)

QUESTIONS AND ANSWERS.

APPLETON'S "HAND-BOOK OF CHEMISTRY."

1. Q. What gave chlorine its great commercial importance? A. Its extraordinary bleaching powers.
2. Q. What are its three most striking properties? A. Its weight, color, and odor.
3. Q. What is the meaning of the word? A. Light green.
4. Q. What singular mistake was made regarding Scheele, its discoverer? A. He was so little known that upon the king's order that he should be knighted, the honor was given to another of the same name.
5. Q. Of what article of human food is chlorine a constituent? A. Salt.
6. Q. What is the chemical name for salt; and what is its symbol? A. Chloride of sodium; NaCl.
7. Q. Under what condition may chlorine and hydrogen be safely mixed? A. In a dark room.
8. Q. Upon what was Balard experimenting when he discovered bromine? A. The bittern left by sea water after the salt was separated.
9. Q. What great chemist regretted the oversight which deprived him of the honor of discovering the substance? A. Liebig.
10. Q. What is the meaning of the word bromine? A. Bad smell.
11. Q. In what art is bromine used largely? A. Photography.
12. Q. In the form of potassic bromide for what is it used? A. For medicinal purposes.
13. Q. What is the third elementary substance which is found in sea water? A. Iodine.
14. Q. What possesses the power of extracting it from the water? A. Sea-weed.
15. Q. What renders the discovery and production of iodine especially interesting? A. It is connected with the history of the leading products of the chemical arts, and with the political and military affairs of France; and its usefulness is in marked contrast with the misfortunes that overtook its discoverer.
16. Q. What is the principal product of that greatest of all the chemical industries, the alkali trade? A. Soda carbonate.
17. Q. In what is this great production used? A. The most extensive industries, such as soap and glass making, and the bleaching industry.
18. Q. What effect had the French Revolution upon the manufacture of soda alkali? A. The great draft upon this substance for processes necessary in making gun-powder, led to the sudden development of the Leblanc process, in which common salt is substituted for sea-weed ashes.
19. Q. While manufacturing saltpetre what peculiar manifestations led Courtois to the discovery of iodine? A. The corrosion of his copper kettles and the appearance of a magnificent violet vapor.
20. Q. What important characteristic of iodine renders it valuable in photography? A. That in the form of argentic iodide it turns black upon exposure to sunlight.
21. Q. In what form is it probable that fluorine exists? A. As a colorless gas.
22. Q. What is its strongest characteristic? A. Its affinity for silicon.
23. Q. What striking exception does this compound of silicon present to its other compounds? A. This one exists in the form of a gas.
24. Q. In what is fluorine different from any other element? A. It is not known to unite with oxygen.
25. Q. To what practical application is hydro-fluoric acid chiefly put? A. The etching of glass.
26. Q. Who discovered oxygen? A. Priestley.
27. Q. What has the day on which this discovery was made, been called? A. The birthday of modern chemistry.
28. Q. What is said of Priestley's life? A. It included ample material for a romance.
29. Q. What do chemists mean by the expression *permanent gas*? A. A gas which resists all attempts to liquefy it.
30. Q. Is oxygen of this nature? A. It was thought to be permanent until quite recently, when it was shown that intense cold and pressure would liquefy it.
31. Q. How is oxygen often designated? A. As a supporter of combustion.
32. Q. What is ozone? A. A peculiarly arranged group of oxygen atoms.
33. Q. What is meant by allotropism? A. That property of chemical elements which renders them capable of existing in various forms.
34. Q. What three modifications of carbon are known to exist? A. The diamond, graphite, and charcoal.
35. Q. What experiment proves that the diamond is related to coal? A. Burning it in pure oxygen.
36. Q. What compounds are formed of oxygen and hydrogen? A. Water and hydrogen dioxide.
37. Q. What invention utilizes the enormous heat of hydrogen? A. The blow pipe.
38. Q. In what is a practical application of the blow pipe shown? A. The calcium, or Drummond, light.

39. Q. In connection with what does oxygen perform one of its most important offices? A. The processes of animal respiration.
40. Q. What is the chemical expression for water? A. H_2O .
41. Q. To what is the relative amount of water existing upon the earth compared? A. To the amount that would remain on an orange dipped in water and then removed.
42. Q. What remarkable exception to all other processes of solidification does water in freezing present? A. It expands and becomes relatively lighter.
43. Q. What does the common expression, "It is too cold to snow," mean when translated into scientific language? A. "If snow were condensing in the upper air, the heat given out would have reached us."
44. Q. What effect upon the climate have considerable bodies of water? A. They tend to equalize the temperature.
45. Q. To what artificial contrivances of power are the sun and water compared? A. The boiler and steam-engine.
46. Q. Where do deposits of sulphur occur in the greatest quantities? A. The neighborhood of volcanoes.
47. Q. What is the black substance which forms on a silver spoon with which an egg has been eaten? A. Sulphide of silver.
48. Q. What is generally admitted to be a precise measure of the advance of any country in the industrial arts? A. The amount of sulphuric acid used.
49. Q. Where is borax found in largest quantities? A. In Borax Lake California, and in Tuscany.
50. Q. In what is it used chiefly? A. In the manufacture of porcelain and in other industrial arts and in the practice of medicine.

STEELE'S "POPULAR ZOOLOGY."

1. Q. What is meant by organic matter? A. Matter which has or once had life, and is of a definite structure.
2. Q. Of what is it made up? A. Cells composed of protoplasm.
3. Q. Into what two kingdoms are organisms divided? A. Vegetable and animal.
4. Q. What is said of resemblances between these kingdoms? A. Some of the lower forms almost defy distinction.
5. Q. What is zoölogy? A. The science which treats of the animal kingdom.
6. Q. In what order does a systematic zoölogist proceed in his study? A. He first deals with the individual; then, successively, with the family, the order, the class, and the branch.
7. Q. Trace the lowest form of life mentioned in the text through its proper classification? A. Individual, *amæba*; family, *amæba proteus*; order, *foraminifera*; class, *rhizopoda*; branch, *protozoa*.
8. Q. Describe the protozoans? A. They are minute jelly-like forms living in salt and fresh water.
9. Q. In what way have foraminifera been active agents in modifying the geological formation of the globe? A. Their shells have fallen to the bottom of the ocean and formed great beds of limestone.
10. Q. What remarkable power is possessed by some of the protozoans? A. That of producing a phosphorescent light which on quiet evenings illumines the surface of the sea for miles in extent.
11. Q. Of what have the members of this lowest branch of the animal kingdom been found capable? A. Motion; sensation; finding, securing, and assimilating food; and of reproduction.
12. Q. On account of their multiplicity of cells what name is given to the remaining branches taken together? A. Metazoans.
13. Q. What constitute the next higher branch above the protozoa? A. The porifera.
14. Q. How are they described? A. As animals whose bodies consist of numerous cells supported by a frame work.
15. Q. How does Huxley describe a sponge? A. As a sub-aqueous city whose people are arranged along the streets in such a way that each can choose his food as it passes along.
16. Q. What are the most beautiful of the sponges? A. The silicious, or glass varieties.
17. Q. In the ascending scale what animals are first provided with a true mouth? A. The coelenterata.
18. Q. What animal belonging to this branch is the first provided with organs of hearing? A. The Medusa.
19. Q. To what is the jelly-fish likened when it frees itself from its attached form and swims away? A. To a saucer.
20. Q. Of what is the body of this fish mostly composed? A. Of water, to such an extent that after remaining in the sun's rays until all moisture is absorbed little more than a scale will be left.
21. Q. Is coral deposited as the result of the industry of the animals? A. No, it merely serves the animals as a support.
22. Q. Mention some of the different kinds of corals? A. Mushroom, cup, branching, red, and organ-pipe coral.
23. Q. What is the meaning of the name given to the fourth branch? A. Spiny-skinned.

24. Q. What are some of the individuals chosen as representatives of its different classes? A. Stone lilies, star fishes, and sea urchins.
25. Q. What organs are first met with in the sea urchin? A. Teeth.
26. Q. What term is used to characterize a structure presenting two equal sides? A. Bilateral symmetry, first seen distinctly in the sea otter.
27. Q. What is the fifth branch of the trunk of the animal kingdom? A. Vermes.
28. Q. What animal of this branch produces in sheep the disorder known as "rot"? A. The liver fluke.
29. Q. To what branch do the clams, snails, and oysters belong? A. Mollusca.
30. Q. What animals were the first lung-bearers? A. Snails.
31. Q. What is the highest branch of the invertebrate animals? A. The arthropods.
32. Q. What is the distinguishing characteristic of this branch? A. The appendages are jointed.
33. Q. What order of this branch is very troublesome to vessels? A. Barnacles.
34. Q. What peculiarity of the eyes, not seen in any other branch, is noted in some insects? A. They are compound.
35. Q. To what order of the arachnida do spiders belong? A. The araneida.
36. Q. What is their most striking peculiarity? A. Their power of web making.
37. Q. How is the body of the true insect divided? A. Into three parts, head, thorax, and abdomen.
38. Q. What is the most striking peculiarity of this class? A. The

series of changes through which many forms pass before they reach the adult condition.

39. Q. Mention some individuals belonging to the order orthoptera? A. Cockroaches, katydids, and locusts.
40. Q. What is the distinguishing feature of true bugs? A. The mouth is produced into a long sucking proboscis.
41. Q. What distinguishes the beetles? A. Anterior horny wings meeting when closed in a straight line along the back.
42. Q. To what order do the common house flies belong? The diptera or two-winged insects.
43. Q. What groups of the lepidoptera are popularly and scientifically distinguished? A. The moths and the silk worms.
44. Q. What was the native home of the silk worm? A. China.
45. Q. What insect acts as a check to the inordinate multiplication of other insects? A. The ichneumon fly.
46. Q. Of what does an embryo colony of ants consist? A. Of one or several queens, the young workers and soldiers, and the winged ants which leave their home in swarms in the spring.
47. Q. Into what do the first laid eggs of the humble bee develop? A. Into workers.
48. Q. When does the queen bee head the swarm and start to found a new colony? A. When she discovers that a young queen is about to emerge from her cell.
49. Q. Upon what does the quality of the honey and the wax depend greatly? A. The character of the food.
50. Q. By what enemies are bees infested? A. By a variety of parasites, and by the wax-moth which consumes the wax.

THE QUESTION TABLE.

THE WORLD OF TO DAY.

THE DARK CONTINENT.

1. At the time of the founding of the African Association in London in 1788 how much was known of the geography of Africa?
2. What was the most successful exploring party sent out by that Association?
3. What discovery by Livingstone in 1849 gave an impulse to exploration that has never since been lost?
4. What lakes were discovered by Speke and Baker?
5. By whom and when was Stanley sent to Africa to find Livingstone?
6. When and where did Stanley and Livingstone first meet?
7. Where did Livingstone die, and where is he buried?
8. The proprietors of what two newspapers sent Stanley in 1874 to explore the lake region of equatorial Africa?
9. Who is Tippoo Tib, and of what service was he to Stanley in that expedition?
10. What was the nature of the work done by Stanley during the six years of his service in Africa under the patronage of Leopold of Belgium?
11. Who is Emin Pasha, and why was an expedition sent to his rescue?
12. When did Stanley sail for Africa to take command of the party in search of Emin Pasha?
13. With how large a force did he start from Zanzibar?
14. What source of supplies for Stanley and Emin Pasha was cut off last July?
15. What was the date of the latest published letter from Stanley?

ANIMALS AS SERVANTS.

1. What draught animals are most valuable to men living in the frozen latitudes?
2. What animals native to Asia were introduced some years ago into the southern part of the United States for the purpose of carrying supplies over the plains now crossed by the Pacific railway?
3. What beast of burden has been called "the ship of the desert"?
4. What animals have figured largely in the history of war, and at the present time are employed in the East for moving heavy artillery and baggage?
5. What animals were preferred to horses by nations of antiquity on account of their easier management, harder nature, and less expensive keeping?
6. What animals take the place of horses in the Hudson Bay Territory?
7. What breed of horses is most remarkable for fleetness and docility of temper?
8. What animal takes the place of the horse among the Indians of Peru and Chili?
9. What members of the horse family, native to South Africa, have been occasionally domesticated and used as draught animals?
10. In commemoration of what custom was the image of an ox stamped on the first metal coins of Greece?
11. What custom left its mark in the English word "pecuniary"?
12. What animal of the ox tribe is employed in Thebes and Central Asia as a beast of burden and for agricultural work?
13. What horned animals held sacred by the Hindoos are trained to do the work of horses in the northern provinces of India?

14. What animals have borne a prominent part in Arctic exploration?
15. What animals act as "brothers of mercy" in the Alpine regions?
16. By fifty of what animals trained by the Greeks for war, is Corinth said to have been saved once, as they held at bay the enemy approaching a sleeping garrison?
17. What animals were used by the inhabitants of Thrace to test the ice of a river?
18. What small carnivorous mammal of the genus *Lutra* has been trained to drive fish into a net or even to catch them and bring them in its teeth to its master?
19. What animals of the cat family, called by Cuvier canine cats, are trained in Arabia for hunting deer?
20. What small digitigrade animal has been trained to hunt rabbits and rats?
21. What tiny insects have been taught to draw miniature carriages, and to go through with military exercises and other remarkable feats?
22. What title was given to John Wood who was appointed by James I. of England to be the keeper of certain birds—the emblem of gluttony—imported from China, which were trained to fish for their masters?
23. What species of bird is kept in the East Indies for the purpose of warming its owner's hands in the winter?
24. For what is the eagle said to have been trained in Persia, Tartary, India, and other parts of the East?
25. What birds have been employed as messengers, and have been especially useful as such in war times?

JOSEPH PRIESTLEY.

1. When and where was Joseph Priestley born?
2. What was the religious belief of his parents?
3. By whom was the boy adopted after the death of his mother?
4. What education did he receive before entering the Daventry Academy?
5. What change took place in his religious views while at the Academy?
6. What two causes prevented his attaining popularity as a preacher?
7. What did he teach and what studies did he pursue in the six years spent at Warrington Academy?
8. What honors did his "Chart of History" and his researches in electricity bring him?
9. His "History of Electricity" was suggested by what personal friend?
10. Turning again to speculative philosophy what views did he adopt in place of those held when leaving Daventry Academy?
11. What gas discovered by him did he call dephlogisticated air?
12. What other names have been given to the same gas by different scientists?
13. This discovery was followed by what others?
14. What treatise procured him an honorary citizenship in the French Republic, and was the cause of a riot at Birmingham?
15. What loss did he suffer at the hands of this mob in Birmingham?
16. When did he remove to the United States, and in what state did he pass the remainder of his life?
17. In what American university was he offered a professorship?
18. At what age did he die?
19. The bibliography of Priestley's productions includes how many publications?
20. Where have statues of Priestley been erected?

GREEK ALLUSIONS IN ENGLISH LITERATURE.

1. In what poem does Wordsworth develop the "physical theory" of Greek mythology?
2. To whom does Saxe refer in the following lines:
"He broke their bodies and cracked their bones,
Minding no more their moans and groans,
Than the grinder heeds the organ's tones"?
3. What are two well known burlesques of the story of Pyramus and Thisbe?
4. What poem by Keats is founded on a story of Greek witchcraft?
5. What reference to Hyacinthus occurs in "Lycidas"?
6. Milton in "Hymn for the Nativity," and Keats in "Endymion" refer in what words to the fable of the Halcyon?
7. The tragic story of what queen furnished Byron with an illustration of the fallen condition of modern Rome?
8. Of what city did Byron write "She looks a sea-Cybele fresh from ocean"?
9. What reference is made to the power of Orpheus' music in the "Ode for St. Cecilia's Day"?
10. Of what Titan did Byron write,
"Thy god-like crime was to be kind;
To render with thy precepts less
The sum of human wretchedness,
And strengthen man with his own mind"?
11. Of what noted woman did Tennyson write,
"A daughter of the gods, divinely tall,
And most divinely fair"?
12. In Tennyson's "Dream of Fair Women" who is represented as saying,
"Dimly I could descry
The stern black-bearded kings with wolfish eyes,
Waiting to see me die"?
13. Of what queen was the following epigram written:
"Unhappy, . . . , was thy fate
In first and second married state!
One husband caused thy flight by dying,
Thy death the other caused by flying"?
14. To whom does Macaulay refer in his "Lays of Ancient Rome":
"So like they were, no mortal
Might one from other know;
White as snow their armor was,
Their steeds were white as snow"?
15. Who wrote,
"O, ye delicious fables! where the wave
And woods were peopled, and the air, with things
So lovely! why, ah! why has science grave
Scattered afar your sweet imaginings"?

PRONUNCIATION TESTS.—VI.

In the front of the menagerie she saw a *plebeian* youth pointing in a *nonchalant* manner to a placard which read, "No panorama to-day." So she went directly to the lyceum where were assembled many *messieurs* and *mesdames*. The master, after a question of *precedence* had been settled, *peremptorily* called order. There were *prosaic* essays read upon *Morphine*, *Nervine*, *Nemesis*, *Olemargarine*, *Pedagogy*, *Penelope*, *Philanthropy*, and *The Patriot*. One of the essayists was wrongly charged with *plagiarism* and he was with difficulty *placated*. An *orthoepeic* contest now followed, conducted by an *orthopeist* whose *pronunciation* was admirable, but there were many *pitiable* failures. From here she went to the levee for she felt it *obligatory* upon her to meet the society of the place. She was introduced to many *pretty*, *p quant*, *naive*, and some *parvenue*, young ladies. She heard a *prima donna's* *protégé* sing, accompanied by a fine *pianist*. After this she made her *obsequious* and passed out down the *parterre* where she saw a *prestidigitator* performing *medieval* tricks.

ANSWERS TO QUESTIONS IN THE CHAUTAUQUAN FOR FEBRUARY.

THE PANAMA CANAL.

1. The Spanish conquerors.
2. Paris.
3. Count Ferdinand de Lesseps.
4. Ninety-eight, from nearly every nation on the globe.
5. On statistics on economical and commercial questions, on navigation, on ways and means, on technical questions.
6. Across Tehuantepec, 148 miles; Nicaragua, 180 miles; Panama, 45 miles; San Blas, 33 miles; Atrato Napipi, 179 miles.
7. The one recommended by the French engineers Wyse and Reclus, from the Bay of Limon to the Gulf of Panama, a deep tide-level cutting, with a tunnel five and one half miles long.
8. 475,000,000 francs.
9. To commence by leveling the line on the Pacific side down to the mean level of the Chagres and the Rio Grande, and to excavate the tunnel down to ten or twelve metres above the

final level; then to turn the Chagres into this new channel, and make it flow into the Pacific while its old bed was being lowered to the required level of the canal. After the Atlantic division had been completed, to make it again the channel of the Chagres, and complete the excavations in the tunnel and on the Pacific side.

10. Width at bottom, 72 feet; at top, 131 feet; depth of water, 29½ feet.
11. 72 days and 7,370 miles.
12. Nicaragua.
13. Of the 170 miles across the country, 140 will be free navigation and only 30 miles of canal excavation. Being in the heart of the trade-winds it would assist sailing vessels. It is 800 miles farther north than the Panama route.
14. The passage would require at least three days. There would be many locks required, the failure of any one of which would obstruct the entire line. The harbor on the Atlantic side is irretrievably ruined.
15. The entire cost is estimated at \$55,000,000, less than one seventh the present obligations of the Panama company.

JOHN BUNYAN.

1. The House of Commons gained the consent of Charles I. to the Petition of Right.
 2. He was haunted by religious terrors, his sports were interrupted by fits of remorse, and his sleep disturbed by dreams of fiends trying to fly away with him.
 3. That they were doubtless exaggerated.
 4. That of 1645.
 5. "The Plain Man's Pathway to Heaven" and "The Practice of Piety;" The Bible and Fox's "Book of Martyrs."
 6. "Grace abounding to the Chief of Sinners."
 7. In the opening sentence, as a "den."
 8. The making of long-tagged laces.
 9. On the day following the signing of the order for his release.
 10. He became the head of the Baptist community, and vast crowds gathered wherever he was announced to preach.
 11. "You need not remind me of that. The devil told me of it before I was out of the pulpit."
 12. "Some said, John, print it; others said, Not so. Some said, It might do good; o' hers said, No."
 13. Milton.
 14. He said that if "The Pilgrim's Progress" had never been written, "The Holy War" would have been the best religious allegory in the world. Froude criticises the plot prolonged through endless vicissitudes with a doubtful issue, and the unpleasant manner of revealing the incomprehensibility of the Being who allows Satan to defy Him so long and successfully. While it professes to interpret the mystery of life it only restates the problem in a more elaborate form. "The question to us is if the facts are true. If true, they require no allegories to touch our hearts or intellects."
 15. "The Life of Mr. Badman."
 16. "Who would true valor see,
Let him come hither,
One here will constant be,
Come wind, come weather."
- See Act II. Scene V.:
. . . . "Come hither,
Here shall he see no enemy
But winter and rough weather."
17. The former was written in unsuspicious thankfulness as he knew nothing of the secret designs of court. Fifteen years of observation had made him wiser and he easily understood the object of the second indulgence.
 18. He rode a long distance through a heavy rain, in order to plead the cause of a son with an angry father. The cold contracted, terminated in a violent fever of which he died in a few days.
 19. "Take me, for I come to Thee."
 20. The landing of William at Torbay, November 5, 1688.

GREEK GAMES.

1. The Delian pan-Ionic, in honor of Apollo and Artemis.
2. The Alpheus in Peloponnesus, near the old oracular temple of the Olympian Zeus.
3. Every fifth year, the second full moon after the summer solstice.
4. The honor of being proclaimed victor was found sufficient.
5. A race of runners in the double stadium, or up and down the track.
6. Jumping, running, wrestling, throwing the quoit, and throwing the javelin.
7. The chariot race.
8. Boxing and wrestling conjoined.
9. Five. Until the 77th Olympiad all the various matches had been compressed into one day.
10. The Pythia, near Delphi; the Isthmia, near Corinth; the Nemea, near Kleonæ between Sicyon and Argos.
11. Pythia, Isthmia, and Nemea.
12. The Pythian.
13. Clisthenes, the Sicyonian tyrant.
14. Kylon who attempted to usurp the scepter at Athens; Alexander the son of Amyntas, the prince of Macedon; several of the noted family of Diagoridæ at Rhodes; many generals; see also the Odes of Pindar for attestation of the number of great and wealthy.
15. Pythia, Isthmia, and Nemea.
16. Recitations and lectures by poets, rhapsodists, philosophers, and historians; also a fair for traffic.
17. By a predetermined rule of self-imposed submission to the staff bearers. Thucydides tells how Lichias, one of the chief men of Sparta and a chariot victor, received chastisement from one of these servants for infringement of the regulations.
18. A sacred truce of a month.
19. Forty-four.
20. Sparta.

TALK ABOUT BOOKS.

GEORGE MEREDITH.

For nearly thirty years George Meredith has been adding steadily to his list of published works, in spite of the indifference of critics and the neglect of the public, with little to encourage him save his trust in the genius which inspired him and his confidence in its ultimate recognition and triumph. The reading of a very few pages will prove that this lack of popularity was due to no lack of merit, and it is hard to account for the tardiness with which he has been accorded his proper place,—among the front ranks of the great masters of English fiction. The attention he has aroused in England within the last two years, however, has been sufficient to warrant an American reprint of nine of his novels* in a first-class edition by an enterprising Boston firm. Writing contemporaneously with Thackeray, Dickens, Reade, and George Eliot, his work bears evidence of their influence and reflects what is best and strongest in each. His scenes are laid in the three countries where he has lived, England, Germany, and Italy, and the vast number of distinct types with which he deals are life studies from the higher and lower elements of society in these widely varying nations. His exuberance of animal spirits combined with a seemingly inexhaustible fertility of mind, leads him to lavish upon unimportant situations what other writers would have reserved for greater occasions. As this impedes the course of the narrative he wears the average novel reader. He will fail also to please (though perhaps he may educate) those over fond of character analysis, for his method is dramatic rather than analytic, and a part of the reader's pleasure is found to be that of analyzing for himself. Meredith's people are not bundles of traits. In but one instance can he be accused of dressing up an idea and calling it a man; and yet that one character is so full of the inspiration which Meredith has breathed into it, that it seems to possess the same vitality as the real men and women among whom it moves. It is true that he has a tendency to satire, but it is only in dealing with the affectations and follies of fashionable life, and even then the tendency is held within wise limits. His capacity for sympathizing with and understanding the natures he depicts has kept him from making caricatures of his eccentric characters; narrow, egotistical, amusing, exasperating, whatever they may be, they are never distorted beyond the form of strict probability. In dealing with the varied experiences of life he has not avoided the portrayal of sin; yet it is only to draw a terrible lesson therefrom. His pictures of English school-boy days and the tracings of the indefinable growth of character, as displayed in "Richard Feverel" and "Harry Richmond," have seldom been surpassed. Passing over his wonderful power of description, the wide intellectual atmosphere of his books, the witty conversations and thousands of epigrams with which the pages are crammed, it must be conceded that his highest quality as a writer lies in his portraiture of women. It is here we see his firmest and finest strokes. He has painted them without idealizing or degrading them, depicting a wider variety of types than any other novelist, and in every case preserving a distinct individuality. Some one has written of "The Women of Shakspeare." A not unworthy companion volume could be written on "The Women of Meredith."—"The Pilgrim's Scrip"† was the name chosen for his book of aphorisms by that unconscious hypocrite, Sir Austin Feverel, "who in this bashful manner gave a bruised heart to the world." The same name has been given, rather inappropriately, to the little volume of extracts from Meredith's prose and poetical works. The selections have not been very happily made and fail to show him at his best, but the "Introduction" containing a sketch of Meredith's life and a short review of his writings, in a great measure atones for the disappointment in the rest of the book. The only way to appreciate the "Wit and Wisdom of Meredith" is to read his works, not detached pieces of them.

BOOKS OF TRAVEL.

Less matter and more art in the 606 pages of "The Lands of the Orient"‡ would have made a decidedly more entertaining book; few nowadays can be induced to go through a work written as this one is, in the literary style of a quarter of a century ago—each division of the subject preceded by a little verse, the text sprinkled plentifully with the most familiar of quotations, frequent thanks for the preservation of the traveler, and the like. But the Rev. Mr. Chapman, though uninteresting in style, has scored a strong point on his observations on the missionary work of Japan, China, India, Egypt, Palestine, the Levant, and the tropical islands. This work is made practical and useful by putting in tabular form the missionary work of each denomination.—Dr. Henry M. Field discovered many years ago how to entertain with his travels, and his just published "Gibraltar"§ commands the usual attention and interest. In a sort of friendly way and with no

severe demand upon the mental equipment of the reader, by description and illustration he makes him familiar with certain features of this picturesque and historic town. Dr. Field first takes him to the top of the Rock and impresses him by an outlook over land and sea; then the natural fortifications and all the resources of modern warfare, excite interest and curiosity; now he goes Around the Town to inform him that here is not only a fortress but a quaint old Spanish town, and also to introduce him to the Society of the place; the author next devotes a stirring chapter to The Great Siege; now he calls attention to the effect of Holding a Fortress in a Foreign Country; and regretfully says Farewell to Gibraltar—sailing for Africa.—Another most valuable book of travel, full of useful and interesting information, is the Rev. Virgil Hart's "Western China."¶ A good map of this country, giving the exact route of the party, and a number of illustrations add to the clearness of the text. A more naturally written book is hard to find; the various adventures incident to traveling, descriptions of the unequaled scenery, the peculiar customs and features of the country, a sketch of the ancient industry of the boring and working of salt wells, and of Mt. Omei, the "center of natural and artificial wonders, the like of which may not be found elsewhere in the globe," are narrated in a simple and unaffected manner, yet with strength and force.—Percival Lowell in an original Social Study of the East, makes the impersonality of the people account for their distinctive features and the deeper oddities of their civilization. He looks at them through their every-day thoughts, which enwrap their present life, through their language, which is the spirit of the past, through their religion, which contains the dreams for the future. This impersonality shows itself in the family, in three epochs, birth, marriage, and death. The Jap has not the honor of an own birthday, but celebrates with the community his birth-year; he is not the chief man at his marriage, for this is conducted by "marriage brokers"; after his death he has a little honor, for he has become an ancestor. Their language shows the same characteristic, having no personal pronouns and ignoring sex. Mr. Lowell traces the similarity between Christianity and Buddhism, until you come to the marked personality of the Christian religion, which is in contrast with the impersonality of theirs. In each of these views of them, he finds the same thing—lack of individuality; the individual never experiencing what it is to be "born again" as to his mind, or finding his own personal identity. In his conclusion the author affirms that the most imaginative races have proved the greatest factors in the world's advance; then he makes apparent that the mind of the East is without this creative power, and that through this lack they are in danger of disappearing before the inroads of the imaginative and progressive minds of the West.—Anything from the pen of Charles Dudley Warner is breezy and refreshing; and as regards his "On Horseback in Virginia, etc.," there can be quoted aptly the porter's formula when Mr. Warner asked him concerning the hotels, "We warrant you perfect satisfaction in every respect." With his boon companion the Professor, he takes a delightful jaunt through south western Virginia, North Carolina, and east Tennessee; and there is a world of good fun and enjoyment in it all, told with wit and plentifully sprinkled with irony. It is an interesting country through which these pilgrims travel; a picturesque region, with its numerous mountains, swift streams to be forded, avenues of pink and white rhododendrons,—and yet Mr. Warner says, "There is no landscape agreeable after two days of rusty bacon and slack biscuit." One gets into an entirely different atmosphere from the preceding when traveling in Mexico with Mr. Warner. His style is more sedate, but still the novel, the disagreeable as well as the agreeable are introduced in a charming manner; and this land of wonderful climate and natural beauty, with its amiable and gracious people is attractive. The chapter on "The Golden Hesperides" is racy. And even the Californian must smile at the writer's "quips" and "cranks."

HOME BOOKS.

"Customs differ, but true politeness is everywhere the same," said the "Impenetrable Goodman Dull." The publishers must have had this thought in mind when they re-issued a book on "Manners"|| written nearly a quarter of a century ago. The author discusses courtesy in its many delicate phases, seeming to consider politeness as best defined "real kindness kindly expressed," and these portions of the book are as valuable as when first written, but some of the advice given with all possible gravity regarding customs now practically obsolete, is simply amusing.—The Rev. William Smith has attempted to set forth in a "Series of Addresses to Young People,"‡ the

* Diana of the Crossways. The Ordeal of Richard Feverel. Evan Harrington. Sandra Belloni. Harry Richmond. Vittoria. Rhoda Fleming. Beauchamp's Career. The Egotist. The Shaving of Shagpat and Farina. By George Meredith. Boston: Roberts Brothers. Price, \$1.50 each.

† The Pilgrim's Scrip: or, Wit and Wisdom of George Meredith. Boston: Roberts Brothers. Price, \$1.00.

‡ The Lands of the Orient. Illustrated. By the Rev. M. B. Chapman, D.D. St. Louis: Advocate Publishing House. Price, cloth, \$2.50.

§ Gibraltar. By Henry M. Field. Illustrated. New York: Charles Scribner's Sons.

¶ Western China. A Journey to the great Buddhist Center of Mount Omei. By Rev. Virgil C. Hart. Illustrated. Boston: Ticknor and Company. Price, \$2.00.

† The Soul of the Far East. By Percival Lowell. Boston and New York: Houghton, Mifflin and Company. Price, \$1.25.

|| On Horseback. A tour in Virginia, North Carolina, and Tennessee. With notes of travel in Mexico and California. By Charles Dudley Warner. Boston and New York: Houghton, Mifflin and Company. Price, \$1.25.

|| Manners, Happy Homes, and Good Society. By Mrs. Sarah J. Hale. Boston: Lee and Shepard. 1883.

‡ Life's Possibilities. By the Rev. William Smith, A.M., Ph.D. Cincinnati: Printed for the author. Cranston & Stowe. Price, \$1.00.

essentials of a noble life. The book is a truly helpful one, for the plan is carefully wrought out, and the pleasant conversational style of the author will prove attractive to the class of readers for whom it is intended.—Of the many books suggesting ways of making evenings at home attractive, few are more practical than "Fagots for the Fireside."* The "fagots," over a hundred in all, are games suitable for the family circle and social parties. Some of them require patience, some a ready wit, others a knowledge of literature, some a degree of histrionic talent, while many are just genuine romps. It is a collection quite worthy the author of the inimitable "Peterkin Papers."—† "Notes on the Early Training of Children" ‡ is a modest little volume, full of the gentle spirit of true motherhood, and well calculated to impress the reader with the responsibilities and possibilities in developing the threefold nature of a child.—A book which every young mother will do well to read and ponder is Dr. Starr's series of rules for regulating the diet, clothing, bathing, and exercise of children. It is pleasing to note that a physician, who for many years has made a specialty of the diseases of children, finds it unnecessary to advise the use of drugs, believing the ounce of prevention worth many times its proverbial equivalent. The subject treated most fully is that of the food best adapted to the different periods of the child's life.—The chapter on the feeding of young and delicate children in Dr. Holbrook's "Eating for Strength," § admirably supplements the one just mentioned. The book presents, besides, the most recent results of the scientific investigation of the relation of food to the needs of the body, and adds a valuable collection of recipes for hygienic cookery.—A treasure for busy wives, mothers, and housekeepers is the "Book of Culinary Heresies." ¶ Having the cook in mind rather than the other members of the household, and assuming that there is no waste in the kitchen so much to be deplored as wasted time, the editor has arranged a great number of recipes for appetizing dishes all of which can be prepared easily and quickly; three hundred forty of them are within the limit of from five to fifteen minutes. The chapter devoted to practical suggestions on economizing time and labor in the round of housework, that more hours may be free for recreation and self-improvement, is as sensible as the idea of the book is unique.—Housekeepers of many years experience will find much that is helpful in Mrs. Owen's rules for "Progressive Housekeeping," † while those just starting the wheels of domestic machinery it will save much time and many discouragements in experimenting. A program of work is suggested for each day of the week, with countless hints on the easiest and quickest ways of doing the innumerable tasks necessary to a neat and well-ordered house. This is much the best of this author's admirable series of books.

WHITTIER'S PROSE AND POETRY.

As fine and complete "sets" as a Library of American Literature can put on its shelves will be the new edition of Whittier's prose and poetry.** Beyond their value as literature is the revelation they give of the man. Mr. Whittier has done much for art, he has done more for manhood, and indifferent, indeed, to his own character will the reader be who does not welcome his complete works as much for the sake of finding out on what thoughts, studies, and companionships Mr. Whittier has fed to develop so high and serene a spirit as for the sake of their literary quality. The style, the spirit, the very subjects show the strong, pure, good personality. Not art for art's sake but for righteousness sake has been his aim, and it has given to his poetry a distinctive originality of subject and of treatment. Where another bard would have sung of love, he from the days of his "Toussaint L'Ouverture" to his "On the Big Horn" has celebrated freedom; the inspiration others have found in legend and fairy tale has been furnished him by the noble and brave deeds of his fellow-men whether a "Torrey" or a "Conductor Bradley." Nature and simple home have taken the place of art and works of imagination in his life. The style with which he dresses his thoughts is simple, strong, and manly. Its illustrations are drawn mainly from the annals of the Quakers, from early New England history, and from the current events of our American life. Its figures are from the out-door farm life, so dear and familiar to the poet, from the sea within whose sound he has lived, and from the secrets nature has whispered to his fine ear. There is a fresh cool charm that calms the hottest head and a serenity which soothes the most restless imagination.

Whittier's prose is entitled to respect particularly because of the light it throws on his poetry. It shows where he has browsed and outlines the courses of study and reading he has followed. It reveals, too, his unflinching common sense and charitable spirit. Reformers who catch his dignity, patience, and hope will be armed with the strongest strength. What better exhortation was ever made to the advance guard of a great idea than this

*Fagots for the Fireside. By Lucretia Peabody Hale. Boston: Ticknor and Co. Price, \$1.25.

†Notes on the Early Training of Children. By Mrs. Frank Malleeson. Boston: D. C. Heath and Co.

‡Hygiene of the Nursery. By Louis Starr, M.D. Philadelphia: P. Blakiston, Son and Co. Price, \$1.50.

§Eating for Strength. By M. L. Holbrook, M. D. New York: M. L. Holbrook and Co.

¶Quick Cooking. A Book of Culinary Heresies. For the Busy Wives and Mothers of the Land. By One of the Heretics. New York: G. P. Putnam's Sons. Price, \$1.00.

†Progressive Housekeeping. By Catherine Owen. Boston and New York: Houghton, Mifflin and Co. Price, \$1.00.

**The Poetical Works of John G. Whittier. Four Volumes. Price, \$6.00. Whittier's Prose Works. Three Volumes. Price, \$4.50. Riverside Edition. Boston: Houghton, Mifflin & Co. 1888.

E-mar

read at the woman's convention last year: "The work still before you demands on your part great patience, steady perseverance, a firm, dignified, and self-respecting protest against the injustice of which you have so much reason to complain, and of serene confidence which is not embittered by hostile criticism, nor provoked to use any weapons of retort, which like the boomerang fall back on the heads of those who use them." In both prose and verse, hope and good cheer abound to the very end. The secret of both, Mr. Lowell gave when he said lately, "Mr. Whittier has led a good, pure life, and I have often observed that men who lead good, pure lives are very apt to be cheerful in their old age. And he has done what many nowadays find it difficult to do: he has retained his faith undimmed and strong in the unseen."

The present edition has had the author's personal supervision. His notes explain the source of the poem when necessary—a most helpful arrangement. A splendid feature of the sets is the series of portraits of Mr. Whittier.

BOOKS FOR MUSIC LOVERS.

The character and aim of Felix Mendelssohn are almost as well known as his musical compositions, for the public has had many glimpses of his home and private life through biographies, volumes of reminiscences and the frequent publication of his correspondence. The principal interest therefore attached to this new bundle of "Letters" is in his criticisms of prominent contemporary musicians, which have been withheld until now. His frank expressions of admiration or dislike show that he was something of a conservative in regard to the new methods and developments of the art of music. Time has proved Chopin's genius to be of a higher rank than Mendelssohn was willing to accord it. Schumann, too, he perhaps did not fully appreciate; but few will disagree with his criticisms of some of the minor composers. What could describe Berlioz's orchestration better than this: "It is such a frightful muddle, such an incongruous mess, that one ought to wash one's hands after handling one of his scores." And who that has been obliged to listen to a series of modern "variations" will not echo the sentiment: "They give me as little pleasure as rope-dancers or acrobats; for with them at least there is the barbarous attraction that one is in constant dread of seeing them break their necks; but the piano tumblers do not as much as risk their lives, only our ears; and that I for one will not countenance." The book is enriched by numerous fac-similes of sketches and humorous drawings by Mendelssohn, his own portrait and that of Ignaz Moscheles. The translation is so well done that it is difficult to believe the letters were not originally written in English.—"Standard Symphonies" † is written in a style that cannot fail to stimulate the reader, if also a student of music, to strive to find for himself the underlying meanings of the compositions of the great composers. It contains, besides, a vast amount of information about the symphony, its evolution and structure, with sketches of the composers, and a detailed technical description of a few symphonic models. It meets a recognized want of all concert goers.

AMERICANA.

In the series of "American Commonwealths," the volume devoted to Ohio is occupied largely with the settlement and early history of that part of the country which was not known till some time afterward as this state. The accounts of these early events are well-authenticated, clear, and full of a romantic interest; they are, however, too exhaustive and detailed to be in keeping with the hurried sketching of its history after admission into the Union. One of the most valuable chapters is that devoted to the Moravians, the "Pilgrims of Ohio," whose faithful and earnest work among the people, both red and white, met with a return of bitter wrongs and exile. Just enough of the history of Ohio's part in the wars of the United States is given to stamp it indelibly as among the foremost in patriotism. In the development and progress of the state in all particulars, but few way-marks are pointed out, but these are plain, and indicate the road to her prosperity and greatness.—"The Advance-Guard of Western Civilization" ‡ forms very fitting and connected reading to follow the history of Ohio. Farther into the wilds of the new country the reader follows the brave pioneers. Separated by greater distances from any help from the eastern colonies, they appear at first even more heroic in their undertakings than the settlers of Ohio. This at least is the impression one gains in turning from the one book to the other. A sober second thought, however, reveals the fact, that the impression is due to the difference in the style of the authors. Dispassionate accounts and temperate expressions of opinions mark the style of the one, while that of the other is intense and abounds in strong figures. James Robertson, the man who stood in the same relation to western Tennessee that Daniel Boone did to Kentucky, is the hero of the latter book, and very justly does the author assign the patriot a high place on the roll of fame. The Spanish complication regarding the free navigation of the Mississippi is deftly unraveled, and in the process its tangles explain and well-nigh excuse the attempt of the settlers to form an independent government.—From searching among the records of the past we come upon a description of a part of the country as it

*Felix Mendelssohn's Letters to Ignaz and Charlotte Moscheles. Translated from the originals in his possession, and edited by Felix Moscheles. Boston: Ticknor and Co.

†The Standard Symphonies. By George P. Upton. Chicago: A. C. McClurg and Co. Price, \$1.50.

‡American Commonwealths. Ohio. By Rufus King. Boston and New York: Houghton, Mifflin and Co. Price, \$1.25.

§The Advance-Guard of Western Civilization. By James R. Gilmore. New York: D. Appleton and Company.

now exists, in a volume called "The Florida of To-Day."* The book is prefaced by the merest outline of the history of the state, and then follows in a plain and direct style an account of its geology, its climate, and its productions. The book is evidently designed to boom the state, but the last chapter is a ludicrous one for this purpose. The person would well deserve to rank among the brave, who, even after all the inducements offered previously, should decide to go in the face of the final notification of the numberless pests that exist there and the numberless remedies needed to protect him against them.—Biographies prepared especially for young people multiply rapidly. The life of Gen. Sheridan forms the sixth and last volume of the series, "Young Folk's Heroes of the Rebellion,"† all the books having been written by the Rev. Headley. Warm admiration for the hero is the keynote sounded on all the pages which trace his career from childhood to his death bed. Young Americans will find it a good opportunity for gaining a general knowledge of military life at West Point, and an acquaintance with the events of the Civil War. The pleasing style of the writing joined to the attractive title are fitted to make the work a popular one, and for this reason it is all the more to be regretted that it is marred here and there by traces of bitter partisan spirit. The time elapsed since the events should have obliterated this.—Two more volumes have been added by Mr. Stoddard to his series, "The Lives of the Presidents," one of them containing the history of Grover Cleveland, and the other outlining the careers of Taylor, Fillmore, Pierce,

*The Florida of To-Day. By James Wood Davidson, A.M. New York: D. Appleton and Company.

†Fighting Phil. The Life and Military Career of Philip Henry Sheridan. By the Rev. F. C. Headley. Boston: Lee and Shepard. Price, \$1.50.

and Buchanan.* In the case of each, the family is traced back for several generations and in the narration of the chief events in the lives of the ancestors, the readers obtain a good bird's-eye view of the early history of the country. In writing of the different characters the author takes his standpoint at their side and writes of things as seen from there. He generously attributes to each in turn the noble purpose of honestly striving for the best interests demanded by the times for the people, and irrespective of party relations, denounces all abusive censure and opposition brought to bear against them. Simple in style, kind in spirit, accurate in statement they give clear ideas of political history stripped of all political bitterness.

A HELP FOR SUNDAY-SCHOOL TEACHERS.

Under the direction of Edward Everett Hale, there has been published a most helpful book.† It has for its intention the making of the Golden Texts of the International Series of Sunday-school Lessons, practical and personal. The first half of the texts for 1889 have been taken as the subject of stories written by a "Ten" of persons who are in complete sympathy with Sunday-school work; of the twenty-six in this volume, eight are written by Mr. Hale. Given to a pupil he cannot but be interested in the stories and soon will discover, as perhaps he never has before, that the Sunday-school lesson can be made use of in his every day life, and that it really has something to do with him individually. To many a teacher it will show how out of common occurrences, and out of his own and his friends' experience he can find material to use that attracts and helps.

*Grover Cleveland, Taylor, Fillmore, Pierce, and Buchanan. By W. O. Stoddard. New York: Frederick A. Stokes and Brother. Price, each, \$1.25.

†Sunday-School Stories on The Golden Texts of The International Lessons of 1889. By Edward E. Hale. Boston: Roberts Brothers. Price, \$1.00.

PARAGRAPHS FROM NEW BOOKS.

VALENTINE.

If thou canst chase the stormy rack,
And bid the soft winds blow
(And that thou canst, I trow);
If thou canst call the thrushes back
To give the groves the songs they lack,
And wake the violet in thy track,—
Say why thou dost not so—
Aye, aye!
Say why
Thou dost not so!

If thou canst make my Winter Spring,
With one word breathed low
(And that thou canst, I know);
If, in the closure of a ring,
Thou canst to me such treasures bring,
My state shall be above a king,
Say why thou dost not so—
Aye, aye!
Say why
Thou dost not so!

—From Edith M. Thomas' "Lyrics and Sonnets."*

SENSIBLE SUGGESTIONS TO SCHOOL BOARDS.—At the present time a cess-pool to receive the waste from the water-closets of a school-house is inexcusable. It is in outrageous opposition to sanitary science and common sense.

No school grounds are complete without a sheltering porch or pavilion, under which the scholars can sit when the sun or rain prevents their being actually out from under cover and on the ground. Porches attached to the main building serve something the same purpose, but cannot always be had without obstructing the light of the school-rooms or causing other inconvenience.

The summer comfort of school-rooms in buildings of one story and of the rooms in the top story of higher buildings will be greatly increased if the space between the ceiling and the roof is well ventilated. This is easily accomplished by making outlets through the roof near the ridge and corresponding openings through the under surface of the cornice, the planer, between the rafters.

Generally speaking, north and south lighting is better than east or west. Of these last two, when the school is not opened before nine in the morning or closed before half after four or five, the east is preferable.

Blackboards should not be placed on the wall of the room between or beside the principal windows; and if it is thought necessary to have a large amount of blackboards, they should be furnished with curtains or screens to cover them when they are not in use.

To discuss the best methods of providing fire-escapes for large school-houses, several stories in height, is folly, as regards new buildings, for it is a capital crime, and should be punished as such, to build large school-houses that are not fire-proof.

If windows require partial covering on account of too strong light at any time, the lower part should be covered rather than the top.

*Boston: Houghton Mifflin & Co. 1887. Price, \$1.25.

The chief danger in case of fire in a school-house or other crowded building is from panic, and this is liable to occur when there is no fire, even in a fire-proof structure. For that reason the principal doors of exit should open outwards, and when the building is occupied should be left unfastened.

It is of the utmost importance that the cloak-room should be thoroughly ventilated, liable as they are to be filled with hats, coats, boots and shoes, that are damp and dirty. It is also desirable that they should be warm, but far more important that they should be abundantly supplied with fresh air.—From E. C. Gardner's "Town and Country School Buildings."*

FRANCE, DECEMBER 1870.

O Mother of a fated fleeting host
Conceived in the past days of sin, and born
Heirs of disease and arrogance and scorn,
Surrender, yield the weight of thy great ghost,
Like wings on air, to what the heavens proclaim
With trumpets from the multitudinous mounds
Where peace has filled the hearing of thy sons:
Albeit a pang of dissolution rounds
Each new discernment of the undying ones,
Do thou stoop to these graves here scattered wide
Along thy fields, as sunless billows roll;
These ashes have the lesson for the soul.
'Die to thy Vanity, and strain thy Pride,
Strip off thy Luxury: that thou may'st live,
Die to thyself,' they say, 'as we have died
From dear existence, and the foe forgive,
Nor pray for aught save in our little space
To warm good seed to greet the fair earth's face.'
O Mother! take their counsel, and so shall
The broader world breathe in on this thy home,
Light clear for thee the counter-changing dome,
Strength give thee, like an ocean's vast expanse
Off mountain cliffs, the generations all,
Not whirling in their narrow rings of foam,
But as a river forward. Soaring France!
Now is Humanity on trial in thee:
Now may'st thou gather humankind in fee:
Now prove that Reason is a quenchless scroll;
Make of calamity thine aureole,
And bleeding lead us thro' the troubles of the sea.

—From George Meredith's "Ballads and Poems of Tragic Life."†

JOKES AT ETON COLLEGE.—Anecdotes of Keate's day abound in all Eton memories. Practical jokes were more common then than now, and there was perhaps an additional enjoyment of them by Keate's pupils from the certain explosion of rage which they called forth from him when discovered. A young nobleman, disguised in an old gown and cocked-hat, so as to present by moonlight a passable likeness of the Doctor, painted Keate's door a bright red one night before the eyes

*New York and Chicago: E. L. Kellogg & Co. 1888.

†Boston: Roberts Brothers. 1887.

of the college watchman, who stood looking on at a respectful distance, wondering what the Doctor could be at, but not daring to question his right to do as he pleased with his own. Among other forbidden indulgences in the school Keate had thought proper to include umbrellas, which he regarded as signs of modern effeminacy. Boys are perverse; and when to the comfort of an umbrella was added the spice of unlawfulness it became a point of honor with some of the larger boys to carry one. The Doctor harangued his own division on the subject in his bitterest style, and ended by expressing his regret that Etonians had degenerated into school-girls. The next night a party made an expedition to the neighboring village of Upton, took down a large board inscribed in smart gilt letters, "Seminary for Young Ladies," and fixed it up over the great west entrance into the school yard, where it met Keate's angry eyes in the morning.

But few stories of that day are complete without a flogging. It is said that on one occasion, when a confirmation was to be held for the school, each master was requested to make out and send in a list of candidates in his own form. One of them wrote down the names on the first piece of paper which came to hand, which happened unluckily to be one of the slips, of well-known size and shape, used as flogging-bills, and sent up regularly with the names of delinquents for execution. The list was put into Keate's hands without explanation; he sent for the boys in the regular course, and in spite of all protestations on their part, pointing to the master's signature to the fatal bill, flogged them all (so the story goes) there and then. Such legends may not always bear the strictest investigation, but they have

at least the sort of truth which some Romanist writers claim for certain apocryphal *Acta Sanctorum*—they show what sort of deeds were done.—*Quoted from Etoniana in Reddall's "School-Boy Life in Merrie England."*¹⁸

WOODLAND PEACE.

Sweet as Eden is the air,
And Eden-sweet the ray.
No Paradise is lost for them
Who foot by branching root and stem,
And lightly with the woodland share
The change of night and day.

And this the woodland saith:
I know not hope or fear:
I take what'er may come;
I raise my head to aspects fair,
From foul I turn away.

Sweet as Eden is the air,
And Eden-sweet the ray.

—From George Meredith's "A Reading of Earth."¹⁴

* New York: Phillips and Hunt. Cincinnati: Cranston and Stowe. Price, \$1.00.

† New York: Macmillan & Co. 1888.

SUMMARY OF IMPORTANT NEWS FOR JANUARY, 1889.

HOME NEWS.—January 1. Total eclipse of the sun visible in the north-western part of the United States.—Burning of the Richardson Drug Company's building in St. Louis, Mo.; loss, \$900,000.

January 2. Congress reconvenes after the holiday recess.

January 4. The bill to incorporate the Nicaragua Canal Company is passed with amendments by the House.—The Rev. Dr. Geo. E. Reed, of New Haven, Conn., accepts the presidency of Dickinson College.—The officials and strikers of the C. B. and Q. R. R. come to an agreement.

January 6. The Civil Service Commission issues new rules to regulate appointments and promotions in the railway mail service.

January 7. The Senate adopts a resolution asserting that the interference of any European government in inter-oceanic canals on the American continent is injurious to the rights of the United States.

January 9. A tornado causes great destruction of life and property in Pittsburgh, Reading, and other Pennsylvania cities, and destroys the old Suspension Bridge at Niagara Falls.

January 11. The Dakota Legislature passes a memorial asking Congress to open the Sioux Reservation.

January 14. Admiral Kimberley is ordered to Samoa to protect American interests there.

January 15. Death of John M. Phillips, senior agent of the Methodist Book Concern.

January 17. The 183d anniversary of Franklin's birth. A marble statue of him is unveiled in Washington, D. C.

January 18. The House passes a bill to admit South Dakota, Montana, Washington Territory, and New Mexico into the Union.—The Senate passes the sugar bounty section of the Tariff Bill.

January 19. In the House the Fortifications Appropriation Bill is passed in committee of the whole.

January 21. Twenty-first annual convention of the National Woman's Suffrage Association opens in Washington, D. C.

January 22. The Senate passes the Allison Tariff Bill.

January 24. The 250th anniversary of the adoption of the Connecticut Constitution is celebrated at Hartford.

January 28. Duluth, Minn., sustains a \$250,000 fire.

January 29. A tie up of twenty street-car lines in New York City.

January 31. Death of James R. Lamden, the celebrated portrait and landscape painter.

FOREIGN NEWS.—January 2. Mr. Gladstone is accorded a reception in the municipal palace by the authorities of Naples.—The lord mayor of London and the mayor of New York exchange greetings by phonograph.

January 3. Severe earthquake shocks in Turkestan and Nicaragua.

January 4. Death of J. O. Halliwell-Phillips, the Shaksperian scholar.

January 7. Prince Henry of Battenberg appointed governor of the Isle of Wight.

January 11. The Royal College of Surgeons, London, censures Dr. Mackenzie for publishing his book on the Emperor Frederick's case.

January 12. The British steamer *Priam* wrecked off the coast of Spain, and nine lives lost.

January 14. Emperor William opens the Landtag.

January 16. A letter from Henry M. Stanley, dated August 17 and confirming the fact of his arrival on the Aruwhimi, is received at Brussels.—Arab slave-dealers destroy a German mission station in East Africa and massacre the inmates.

January 17. The French Senate passes a bankruptcy bill which enables the Panama Canal Company to reorganize and continue the project.

January 21. An earthquake in Asia Minor destroys three hundred houses.

January 23. Death of Alexandre Cabanel.

January 27. General Boulanger elected deputy for the Department of the Seine by 81,550 plurality.—The Emperor William's birthday observed in Berlin.

January 28. The French ministry resign, but President Carnot refuses to accept their resignation.—Death of M. Carteret, leader of the Swiss Radicals.

January 30. Death of Crown Prince Rudolph of Austria.

MEETING OF THE BOARD OF TRUSTEES OF THE CHAUTAUQUA ASSEMBLY.

The annual meeting of the Board of Trustees of the Chautauqua Assembly was held in January last, at Akron, Ohio. The report on the Assembly read by the Secretary, Mr. W. A. Duncan, was so full of encouragement and promise that the meeting was characterized by unusual good cheer and hopefulness. The former officers were re-elected: Mr. Lewis Miller of Akron, Ohio, president; Bishop Vincent, Chancellor; Mr. Francis Root, of Buffalo, N. Y., and Mr. Jacob Miller of Canton, Ohio, vice-presidents; and Mr. W. A. Duncan, of Syracuse, N. Y., secretary, and superintendent of grounds. The report from Bishop Vincent of the Chautauqua work we print in part.

THE CHAUTAUQUA WORK.

It becomes my duty once more to report to you concerning the work of Chautauqua; and it is with pleasure, which I know you will share, that I am able to say that the movement has not suffered retrogression during the past year. The progress of our organization has upon the whole been positive and marked. Not only are we accomplishing an increasing amount of work, but we are steadily gaining the recognition, sympathy, and co-

operation of those who, naturally enough, regarded our work at first with suspicion, and held aloof.

Last August a Summer Session was held at the University of Oxford under the auspices of the "University Extension Society of England." At the opening of this meeting, full credit was given to the American Chautauqua for the suggestion of the plan, and in the published reports of the "Extension" meetings the idea is spoken of as coming from an American source. We have every reason to feel gratified at this incident, which, together with several leading editorials in prominent English newspapers describing the Chautauqua work and urging its adaptation to English needs, prove that our work is gaining ground, and is enlisted the sympathy in a very broad way of those who are interested in the cause of popular education. But, as wise men, we cannot make the mistake of halting even for a moment to enjoy the pleasure which such a knowledge brings with it. It serves us best only as it spurs us on to renewed and more earnest endeavor.

Chautauqua has come to be regarded as an educational force, and it must be thought of broadly as an institution which aims to offer aid to the vast

majority who must be in a sense self-educators. In doing this, it must raise a high standard; it must deprecate self-satisfaction over slight result; it must urge on to thoroughness and persistency of effort; it must provide opportunities for broad and symmetrical culture; it must hold up the idea of a religion which claims the whole man and not alone his emotional nature; it must call for enthusiasm but not for fanaticism; it must point to the college as providing the best opportunity for study, but it must emphasize two facts: that education may be obtained outside of college walls, and that true education consists not in accumulating stores of knowledge, but in training the faculties to efficiency and usefulness.

Now, in order intelligently to grasp our whole plan, let us take up in logical order the departments by which we are trying to help the people of the United States and other lands. The pioneer work of Chautauqua is done through the *Chautauqua Literary and Scientific Circle*—in one sense the most important branch of our work. It is through this system of reading that we arouse people from intellectual lethargy and apathy; that we stimulate a desire for systematic and thorough work; that we test them upon all sides with a variety of pursuits in order that any latent power may be detected and developed. There are those who doubt the usefulness of the Chautauqua Literary and Scientific Circle because the absolute amount of knowledge acquired is so small; but they lose sight of the really great work which is accomplished in overcoming the inertia of the people, and in starting them, be it at ever so slow a pace, upon the rising road toward well-rounded development. It behooves us, therefore, to push with all vigor and enthusiasm this advance guard of our educational forces. We should, by liberal financial support, and by every means in our power, give the Chautauqua Literary and Scientific Circle the prominence which it deserves as the foremost factor in the educational work which we are trying to bring about.

For those whom we succeed in arousing through the C. L. S. C., and who are anxious to advance to more systematic and thorough study, we must provide facilities for the higher education. This we do in the *Chautauqua College of Liberal Arts*. In the very nature of things this department of Chautauqua can never be put upon a financially paying basis. Yet it is of great importance to our work as a whole. By means of it we put ourselves as a popular educational institution "in touch" with the best scholars and teachers of the times. By this evidence of our desire to set a high standard and offer the best opportunity, we give pledge of our sincerity and of our conscientious desire to accomplish really worthy results. To many, Chautauqua has been and still is a superficial institution for giving a very large number of people a very thin veneer of spurious culture. But by establishing and supporting the Chautauqua College of Liberal Arts we disprove this assertion by showing that we know how to set a standard of thorough scholarship. It is very appropriate that the popular Assembly exercises should be made the virtual source of an endowment for this College of Liberal Arts, which, as it comes better to be understood, will gain in numbers and in influence.

In the line of systematic and thorough work for more advanced readers and students is the *University Extension* plan, which of late years has been so successfully put into execution by the Universities of Oxford, Cambridge, and London. The work consists in carrying the university to the people, where the people cannot come to the university; or, in other words, sending out lecturers and instructors who shall for a short time set up college courses in towns and cities throughout the country. It was thought that Chautauqua was peculiarly fitted for pushing this work, and for obtaining the co-operation of broad-minded, public-spirited college men from various institutions. In September, a small pamphlet setting forth the aims of "Chautauqua University Extension" was issued, and circulated privately among those who would be most likely to be interested in the work. As a result, we have at present secured the active co-operation of a number of prominent professors in the leading universities and colleges who will superintend the departments of work to be carried on under the auspices of "University Extension." In a short time a new circular containing the full list of the names of those who have given the plan their support will be published, and next fall an attempt will be made to establish "University Extension" courses under the auspices of Chautauqua in a number of towns. In this way the plan will be given at least a trial, and there seems to be no reason why it will not meet with a measure of success, and steadily gain ground as it comes to be more thoroughly understood. There are surely in every community enough who would avail themselves of this plan to warrant the attempt. In the last ten years in England some 60,000 students have been reached with these regular, systematic, thorough courses of study in a wide range of subjects, and Chautauqua will certainly only be extending its work in legitimate lines when it pushes this new plan. The local lectures are self-supporting, being provided for by local subscriptions and the sale of tickets, so that no serious encroachment will be made upon the treasury of Chautauqua, although if the work should assume considerable proportions, it may be necessary to employ a special secretary. For some time at least the Registrar of the Chautauqua College of Liberal Arts will be able to manage this new department.

Up to this point, the educational work of Chautauqua has been considered independent of any local association with Chautauqua itself. The summer work is additionally valuable of course as it provides personal contact with instructors and with distinguished men, and as it fosters the *esprit de corps* of the Chautauqua Literary and Scientific Circle, and provides a source of comradeship and enthusiasm which permeates Chautauquans all over the land, and which adds large numbers every year to their ranks.

The following report of the work done by the Chautauqua Press will be especially interesting to readers in the Chautauqua Literary and Scientific Circle.

THE CHAUTAUQUA PRESS.

The Chautauqua Press under the auspices of which all the publications of Chautauqua are issued, is properly divided into two co-ordinate departments: 1. *The Department of Periodicals*, under the direction of Dr. T. L. Flood, and 2. *The Department of Books*, circulars, and advertisements, under the direction of Mr. George E. Vincent. It is with the work of the latter department that this report deals.

The C. L. S. C. Books for the current year have been prepared with care, and are giving general satisfaction. Each year the criticisms of students and broad-minded examiners of our literature enable us to adapt more and more our publications to the special needs of our constituents; and, as a result, we are shaping a literature which is in itself unique as its special aim is the encouragement of self-education. The books for the coming year have been selected and prepared with unusual care, and the proof will be subjected to a more rigid examination than ever before.

The volumes included in the C. L. S. C. course for 1889-1890 are as follows:

1. *Roman History*, prepared on the same lines as the Greek History which is being used this year. The small Chautauqua text-book prepared by the Chancellor some years ago, will be enlarged by Mr. Jas. R. Joy, whose work upon the Greek history has received hearty commendation.

2. In the department of *Latin Literature*, Dr. W. C. Wilkinson has been requested to condense his two volumes on "Preparatory Latin and College Latin" into one book. In this way it is thought that almost as much ground can be covered and that the proportion of attention given to the subject will be both adequate and just.

3. A book on *Political Economy* is being prepared by Prof. Richard T. Ely, of Johns Hopkins University. Dr. Ely's position among the political economists of the country guarantees the scholarship of the volume which he is preparing, and at the same time reckons Chautauqua among the agencies working for a better understanding of the social and political questions of our time. There can be no doubt that this volume in itself will give character to the C. L. S. C. course for next year.

4. *The Subject of Art* is introduced by a capital little hand-book by Mr. John C. Van Dyke, of Rutgers' College, New Jersey, "How to judge of a picture." This book is designed as a guide to those who are not familiar with art in its technicalities, and is a result of an honest effort to give a rational view of art matters.

5. The subject of *Natural Philosophy* will be embodied in an entirely new and revised edition of Prof. J. Dorman Steele's "Physics," to be entitled "The Chautauqua Course in Physics." The volume will be entirely re-set; all the school text-book features will be removed; so that it will present continuously and in an attractive way the main divisions of physical science.

6. The religious book of the course, *The Bible in the Nineteenth Century*, will be supplied by Dr. L. T. Townsend, of Boston, who is making a special revision for the C. L. S. C.

The Director of the "Chautauqua Press" is not only called upon to co-operate in arranging for these books, and in watching their progress through the press, but it is a part of his duty to prepare the *Circulars* which are issued under the various departments, supplying either in whole or in part the necessary copy. During the last year, nine such circulars, ranging from four to sixteen pages, have been issued under the auspices of this department of the "Chautauqua Press."

In addition to this work, the Director of the "Chautauqua Press" in the Book Department in co-operation with the Periodical Department prepared the copy for the *Advance Number of the Assembly Herald* which seemed to be received with favor upon every hand, and which gave a more intelligent and comprehensive view of the summer work at Chautauqua than anything that has been published heretofore.

All the Chautauqua *Advertisements* for newspapers and magazines, etc., are prepared by the Director, and by him sent to the Secretary, who arranges for their appearance in papers, or are sent at the suggestion of the Secretary directly from the office of the Director. Copy for thirty different forms of advertisements was prepared last year; advertisements were sent out from the Director's office to forty-two different papers. In addition to this work, two large posters and a number of small hand-bills were prepared.

It will be seen from this report that the means for bringing the work of Chautauqua before the public are very systematically organized, and that at very short notice circulars and advertisements may be prepared and sent out. In connection with this subject, it should be stated that the Secretary who has in charge the distribution of these circulars has shown very commendable enterprise in securing an intelligent and wide-spread diffusion of our advertising matter among the people whom we are most likely to reach.

By an arrangement with Col. Elliott F. Shepard, of the *New York Mail and Express*, the Director has for some time been furnishing one column each week upon the subject of popular education, describing plans which have been devised both in this country and England for extending the means of self-education and of the higher culture of the people.

It will be the endeavor of the Director to bring the department to a still higher grade of efficiency; to keep himself well-informed upon the latest developments of educational ideas in the United States and other countries; and to watch the literature which is constantly being issued from the press, some of which may be made available for Chautauqua use; and to keep so "in touch" with the times as to give to the press publications a high character for tasteful, intelligent, and effective presentation of our work.